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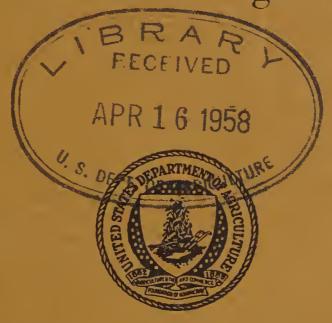
AGRICULTURAL RESEARCH SERVICE
MEAT INSPECTION BRANCH

Manual of
MEAT INSPECTION
PROCEDURES

of the

United States

Department of Agriculture



Edition of January 1956

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AGRICULTURAL RESEARCH SERVICE MEAT INSPECTION BRANCH

Manual of MEAT INSPECTION PROCEDURES of the United States Department of Agriculture

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To employees of the Meat Inspection Branch:

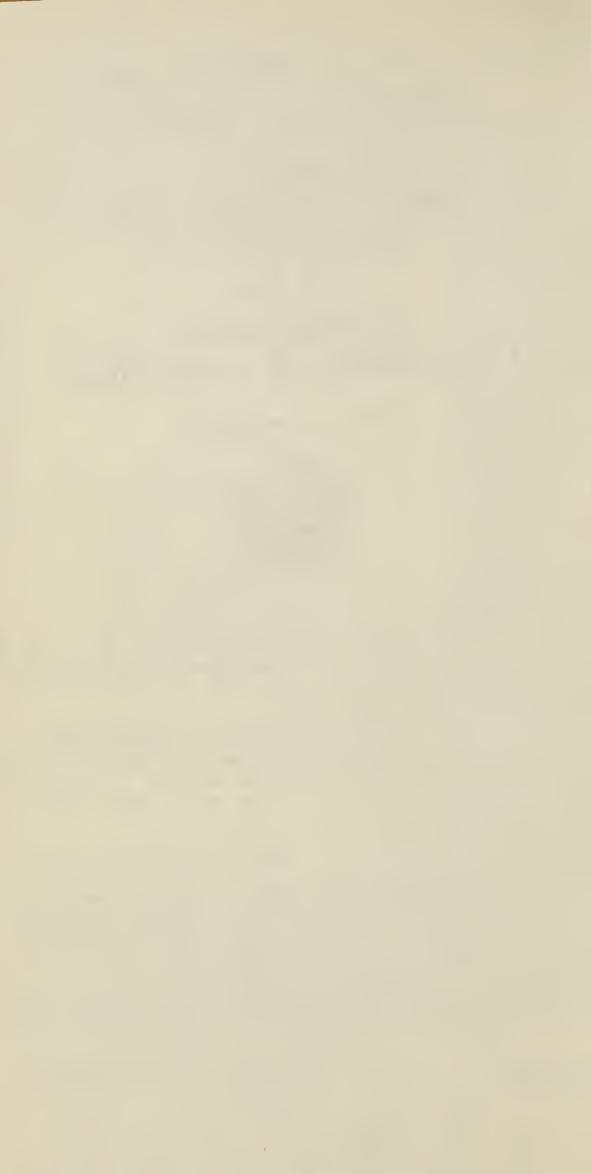
This manual contains instructions on procedures to be used in carrying out the laws and regulations relating to Federal meat inspection. This material shall be regarded therefore as implementing the regulations contained in Subchapter A, Chapter I, Title 9 of the Code of Federal Regulations.

Many references are made to the discretion to be exercised by the inspector in charge. It is the intention that this discretion be given full play to make most effective the decentralized operation of our service which places squarely upon the inspector in charge the authority and responsibility of carrying out the meat inspection program in his area.

The instructions on procedure which have appeared in the previous edition of the Manual of Inspection Procedures and Meat Inspection Branch Memorandums are included in this Manual so that it should not be necessary to refer to these previous sources of information in connection with day to day inspection operations. New instructions will be issued from time to time as may be necessary in Meat Inspection Branch Memorandums and these will periodically be carried forward into the Manual.

It should be clearly understood that this manual is not designed to include instructions issued by the Personnel, Budget and Finance, and Administrative Services Divisions.

A. R. MILLER, Chief, Meat Inspection Branch.



CONTENTS

Par	t	Page
1.	Definitions	1
2.	Scope of inspection	1
3.	Organization of force	2
4.	Applications for inspection or exemption: retail butchers,	
	retail dealers, and farmers	10
5.	Official numbers and inauguration of inspection	14
6.	Assignment of branch employees	16
7.	Facilities for inspection	17
8.	Sanitation	19
9.	Ante mortem inspection	40
10.	Post mortem inspection	44
11.	Disposal of diseased carcasses and parts	58
13.	Tank rooms and tanks	63
14.	Tanking and denaturing condemned carcasses and parts.	64
15.	Rendering carcasses and parts into lard, rendered pork	
	fat, ad tallow, and other cooking	67
16.	Marking, branding, and identifying products	67
17.	Labelling	77
18.	Reinspection and preparation of products	94
20.	Reports	119
21.	Appeals	119
22.	Cooperation with local authorities	119
23.	Bribery, counterfeiting, etc	129
24.	Export stamps and certificates	129
25.	Transportation	133
26.	Federal Food, Drug, and Cosmetic Act	139
27.	Imported products	142
28.	Definitions and standards of identity	187
29.	Inspection and handling of horse meat and products	
	thereof	188
	Index	192



PART 1—DEFINITIONS

1.1 The definition for "animal" includes calves as well as older animals under the general heading "cattle."

PART 2—SCOPE OF INSPECTION

2.1 In determining the eligibility of an establishment to operate under inspection, the sale of meat and product to Federal agencies, such as the Army and Navy, or to others under circumstances which indicate that the purchaser will subsequently move some of the meat or product in interstate or foreign commerce is regarded as placing the business of the establishment in interstate commerce and within the purview of the Meat Inspection Act. It has not been possible to fix a minimum amount of interstate business to permit a plant to qualify for

inspection.

2.2 Occasionally a request is made to permit the slaughter at an official establishment of an animal other than cattle, sheep, swine, or goats. The inspector in charge may permit such slaughter of a food animal, usually buffalo, reindeer, or crossbred buffalo and cattle, provided the facilities are adequate and such handling causes no interference with inspection. Those animals are not subject to inspection and the meat therefrom may not be marked with the inspection legend, except that if sound and wholesome it may be used as an ingredient of certain meat food products, such as loaves, when approved marking or labeling is on file for the finished product containing such ingredient.

2.3 Slaughtering and evisceration of poultry is permissible in an official establishment provided the facilities are approved as adequate for the operation and there is no interference with the inspection. If a separate department is not provided for this purpose, the poultry slaughtering equipment may be in the same room with slaughtering equipment for cattle, calves, etc., but this activity should not be permitted in rooms where exposed meat or product

is being prepared, handled, or stored. Here again, although poultry is not subject to the inspection, only sound wholesome poultry meat may be used as an ingredient of certain meat food products for which markings or

labels are approved.

2.4 Boning does not constitute processing within the meaning of section 2.1 of the regulations. Meat which is boned elsewhere than in an official establishment should be so handled that at least one mark of inspection remains legible upon each piece of meat if the product is to move further in interstate or foreign commerce or if it is to be admitted into an official establishment. The grinding or chopping of meat is regarded as processing within the meaning of section 2.1.

2.5 Each inspector is charged with responsibility to notify his official superior regarding operations affecting the inspection in the establishment or parts of the estab-

lishment to which he is assigned.

PART 3—ORGANIZATION OF FORCE

3.1(a) Meat inspection is conducted by the Meat Inspection Branch. All permanent employees engaged in the work of meat inspection are appointed upon certification of the U. S. Civil Service Commission that they have met the requirements of the Commission. These employees are classified as shown in the following paragraphs. Promotions are made on the basis of qualifications, efficiency, deportment, and length of service.

(1) Inspectors in charge. These inspectors supervise and perform official work at each official station. Such employees report directly to the chief of branch or to a person designated by him and are chosen by reason of their fitness for responsibility as determined by their records in the service. Each station where slaughtering is conducted

shall have a veterinary meat inspector in charge.

(2) Supervising inspectors. These inspectors instruct, direct, and supervise the work of branch employees and perform other official duties as required. They are assigned as the needs of the service require and report directly to the inspector in charge.

(3) Veterinary meat inspectors. All applicants examined for these positions must be graduates of veterinary colleges accredited by the United States Civil Service Commission. Veterinary meat inspectors make ante mortem

and post mortem examinations, enforce the sanitary requirements in their respective departments, and perform various other duties under the direction of the inspector in charge.

- (4) Laboratory inspectors. These employees possess technical education and training in the microscopic, bacteriological, and chemical examination of product, and their inspections are conducted in laboratories located at various slaughtering centers. Pathological and zoological laboratories are also accessible to which, when necessary, specimens may be sent for diagnosis.
- (5) Meat inspectors. These employees assist veterinary inspectors in ante mortem and post mortem inspections, supervise the curing, canning, packing, and other preparation, handling, marking, and labeling of product, examine such articles to detect unsound or unfit conditions, enforce sanitary requirements, and perform various other duties.
- (6) Food inspectors (General). These employees examine for specification compliance and condition, meat and meat food products, sea foods, dairy products, eggs, fruits, vegetables, breads and other foodstuffs offered under contract with certain other governmental agencies and perform various other duties.
- (7) Imported meats and animal by-products inspectors. These employees inspect products, animal byproducts and the like offered for entry into the United States, and enforce regulations pursuant to various laws governing the importation and sanitary control of such articles, and perform various other duties.
- (8) Meat laws investigators. These employees investigate complaints, irregularities, and apparent and alleged violations of laws and regulations governing meat inspection, and perform various other duties.

3.2(a) The Washington Office of the Meat Inspection Branch is organized as follows:

Office of the Chief Administrative Office Animal Foods Inspection Section Army Contract Services Section Biological Control Section Chemical Control Section Inspection Facilities Section Inspection Procedures Section Special Projects Section Trade Label Section

(1) The Office of the Chief has the over-all direction of Federal meat inspection activities, which is accomplished through the administrative sections named. Plans and programs are developed to improve the quality of the meat inspection service and to keep this service abreast of developments in food hygiene, public health, veterinary science, and in the meat packing industry. Plans are formulated for extension of the meat inspection service as required. Through field investigations, policies and methods are developed and their executions standardized to insure the uniform conduct of inspectional procedures and the maintenance of the standard of inspection.

Area directors act as representatives of the Branch Chief in all phases of the meat inspection program and supervise field meat inspection stations by a systematic program of travel to the various field stations as assigned. They confer with inspectors in charge, meat inspection employees and others, examine into the conduct of inspection at stations, and make decisions with respect to current problems and plans for the future. They report their findings to the Chief of the Meat Inspection Branch.

- (2) Administrative Office.—This office is a unit of the office of the Chief of Branch. It is headed by the administrative officer. Direction is given to the organization and functioning of the clerical force in the field. This office manages meat inspection funds, determines space and property needs, and initiates procurement action. Requirements and assignment of personnel to stations is determined with the aid of area directors, and action is taken relating to transfers. Policy concerning meat inspection forms and the compilation of statistics is formulated and carried out.
- (3) Animal Foods Inspection Section.—This section directs a voluntary self-supporting inspection, certification and identification service at approved plants manufacturing canned wet maintenance food and canned or fresh frozen 32 percent component of a maintenance food for dogs, cats and other carnivora. All labels accompanied by formulas are examined for acceptability.

(4) Army Contract Services Section.—This Section directs all the activities associated with specification examinations of product for the Army. It formulates policies and effects procedures related to the examinations.

It maintains liaison between inspection services of the Army and the Branch.

(5) Biological Control Section.—Provides scientific direction and laboratory service in the biological sciences to the problems of meat inspection with special emphasis in the fields of microbiology, pathology, parasitology and serology. Laboratory services include the diagnosis of disease; evaluation of sanitizing agents and practices; processing methods; parasite control practices and identification of the species of origin of meat.

(6) Chemical Control Section.—Technical direction is given the seven meat inspection laboratories engaged in testing and analyzing specimens and samples of meat, meat food products, and the materials used in connection with their preparation. Research investigations are made with the aim of developing new methods of testing and

analyzing, and devising other controls.

(7) Inspection Facilities Section.—Drawings and specifications of new plants are examined and passed upon as well as those projects constituting revisions or extensions at inspected establishments. Policies with respect to structural requirements and equipment necessary for inspection are formulated and applied to drawings and specifications of plants as they are received for review. Applications for inspection are analyzed and decisions are made with respect to granting or denying the requests for inspection.

(8) Inspection Procedures Section.—Operating procedures, rules, and standards are developed to be followed by inspection personnel in conducting at inspected establishments those phases of meat inspection involved in antemortem inspection, post mortem in pection, disposal of diseased carcasses and parts, and sanitary control of slaughtering and other operations incident to the production of meat and meat food products. Some decisions are made with respect to withdrawal of inspection from an inspected establishment. Rules and regulations relating to inspectional procedures are worked out here.

(9) Special Projects Section.—Those phases of the meat inspection law governing importation of meat, exportation of meat, and interstate transportation of meat are administered by this section. Also, policies and procedures are worked out with respect to examinations for compliance with specifications which are conducted at the

request of such Federal agencies as the Navy, Marine Corps, Coast Guard, Veterans' Administration, and Bureau of Indian Affairs. The chief of this Section participates in the formulation of specifications covering articles of food for the Federal Standard Stock Catalog. The Section serves as the focal point in the Branch for handling violations of the meat inspection law. The exemption feature of the meat inspection law for farmers, retail butchers, and retail dealers is also administered by this Section.

- (10) Trade Label Section.—Proposed sketches and labels are examined to assure their acceptability for the particular product and to make certain that they do not bear any misleading feature. They are approved or rejected depending on the findings. Standards of terminology for labels and standards of compositions for meat food products are developed. Instructions are prepared for inspection personnel in the field to assure uniform application of the labeling requirements, and rules and regulations are formulated on this phase of the meat inspection activities.
- 3.3 The inspector in charge is responsible to the area director for the efficient conduct of inspection at his station. He is required to apply the principles of meat hygiene and also the policies and regulations formulated by the Washington office, see that an effective on-the-job training program is carried out for all inspectors at the station, and develop and carry forward at station level the full program of the Meat Inspection Branch. Consequently, he is given a wide latitude for independent judgment in meeting day-to-day problems at his station in a manner which will best carry out the over-all policy, regulations, and orders from the Washington office.

3.4 In-service training of employees responsible for technical operations such as those performed by veterinary meat inspectors and meat inspectors must be built mainly around instructions received while on assigned work from the inspector in charge and others with supervisory responsibility, and in addition, from recommended reference literature and from information received through daily contacts with coworkers. Inspectors in charge, supervisors, and inspectors having supervisory responsibilities, such as "Final Inspectors," must be alert to the training needs of employees under their supervision

during daily contacts with them. As conditions permit, inspectors should be afforded opportunity to work in a training capacity with experienced employees who can instruct them in the various phases of inspection work necessary to better qualify them for performance of all duties of their particular grades or for promotions as vacancies occur in a higher grade. Guides for use in training inspectors are available and should be used to assure uniform training in the conduct of inspection work at all stations.

- 3.5 In the case of "no kill" or "no operation" days, it is difficult to prescribe a uniform procedure to be followed at all stations. As a general practice and subject to the discretion of the inspector in charge, it is sufficient on such occasions for the Branch employee affected to report by telephone when he knows in advance that there will be no work on his assignment. He should report in time to be available for duty should his services be needed. spector in charge is authorized to use such standby time for class or individual instruction, tying it in with the actual experience gained in the in-service program. Such instruction should not be carried to a point where it becomes monotonous repetition for the employee or is used as a means of keeping the employee busy when it serves no instructive purpose. However, an intelligent and wellplanned instruction program is imperative and will improve the individual inspector's knowledge of his job, create a desire for knowledge on the part of many, and improve the efficiency and standard of inspection.
- 3.6 Employee assignments should be in conformity with the employee's grade classification. However, the responsibility of the inspector in charge to organize the force so as to do the work most efficiently and economically carries with it authority to assign an employee according to the work to be done. The inspector must meet whatever conditions arise in connection with taking of leave, changes in number of employees available, changes in amount of work, and the like. When it becomes necessary to assign an employee for an extended period of time to work of a grade either higher or lower than the grade in which he is classified, the inspector in charge shall so inform the Washington office and recommend an adjustment in grade commensurate with the employee's work.

3.7 Assignments of employees should be changed from

time to time, if possible, so that they will have opportunity to become familiar with the various assignments in their grade classification at the station. Also, this rotation of assignments tends to equalize the work load and helps to prevent an inspector from growing "stale" on an assignment. It also breaks up a tendency toward overfamiliarity with representatives of the establishment with whom he comes in daily contact. However, changes should not be so frequent as to preclude the setting up of a progressive improvement program by inspectors.

- 3.8 The inspector in charge is responsible for keeping the Washington office informed with regard to the number and grades of employees necessary to meet the workload of his station. As the character and volume of work change from time to time, the information must be amended accordingly. In this connection, the inspector in charge is responsible for seeing that: (a) The meat inspection work at his station is being properly performed; (b) the positions allocated to his station are of the necessary grade and number to meet the workload; (c) the number of positions in a particular grade is not in excess of that necessary to perform the work; and (d) each person assigned to a particular position is well qualified to do the work.
- 3.9 Inspectors in charge, supervising inspectors and others, such as veterinary meat inspector's having supervisory responsibilities, must be familiar with the rating system which is the official mechanism for evaluating and recording employee performance. They should remember that a supervisor's efficiency is measured to a very considerable degree by his ability to promote greater efficiency in the group he supervises and to develop the personnel under his direction. The employee has a right to expect constructive criticism and suggestions for improvement. The time to let an employee know how he is doing is when he makes a mistake or does a poor job, or when he turns in an average, outstanding, or praiseworthy performance. An occasional discussion between supervisor and employee should improve relationships and overcome deficiencies in the employee's performance.

3.10 Mail sent to the Washington Office of the Meat Inspection Branch should be addressed, "Meat Inspection Branch, Agricultural Research Service, U. S. Department of Agriculture, Washington 25, D. C." Mail may be ad-

dressed to the specific section when the subject matter pertains to certain section responsibilities. Envelopes containing MI Labels, MI Forms, and MI Laboratory Forms, should be marked accordingly and should not contain other mail with the exception of communications pertaining directly to the labels or forms. Use one envelope for as many pieces of routine mail of the same class as possible. Related material should be forwarded together but paper clips and staples should not be used unless they can be folded within several thicknesses of paper.

- 3.11 Packages sent through the mails should be carefully prepared and addressed. Special attention should be given to packages containing specimens of diseased material and dangerous chemicals. Pay strict attention to the applicable postal laws and regulations. The contents of packages should carry identifying information to assure proper handling at destination. If there is a communication having reference to the contents of the package, this fact should be noted on the accompanying form or letter.
- 3.12 Telegraph and long-distance telephone expenses should be kept to a minimum consistent with good business management. When a telegram or telephone call is at the insistence or for the convenience of the official establishment or other interested party, arrangements should be made to have such party bear the cost. This applies also to return calls or telegrams which the Washington office is requested to send.
- An official set of meat inspection regulations, manual memorandums and Reference are to be maintained in each office regularly used by inspectors. The official sets of instructions should be returned to the Washington office of the Meat Inspection Branch when inspection is withdrawn from an establishment where an official set has been maintained in the inspector's office. Requests for additional official sets of instructions should be made to the Washington office when inspection is inaugurated at an establishment where the inspector's office is used as headquarters. Under no circumstances are these official sets to be regarded or maintained as the personal property of any inspector. Each inspector must be fully informed concerning his duties and responsibilities and these are clearly outlined in the material which is included in the official set. The responsibility for current maintenance of

the official set of instructions including the Reference is

placed with the inspector in charge.

3.14 It has long been the policy of Meat Inspection that supervisors are responsible for the safety of employees in their unit. In discharging this responsibility, supervisors should continually encourage employees to use safe working practices and equipment. Unsafe working conditions must be recognized and eliminated wherever possible.

PART 4—APPLICATIONS FOR INSPECTIONS OR EXEMPTION: RETAIL BUTCHERS, RETAIL DEALERS, AND FARMERS

4.1 Applications for inspection are made on Form M. I. 401. The application should be forwarded in duplicate to the Washington office, and if approved and inspection is granted, one copy will be returned to the inspector

in charge for his files.

4.2 The original of the application for a certificate of exemption from inspection should be forwarded through the office of the inspector in charge to the Washington office. The application is made on Form M. I. 417–3, and the comments of the inspector in charge regarding the business of the applicant and the suitability of the applicant's plant are made on Form M. I. 417–2, supplemented if necessary by letter from the inspector in charge. Here again it is desired to stress the importance of the comments and recommendations by the inspector in charge.

4.3 (a) To obtain a certificate of exemption from Federal meat inspection, which will permit the holder thereof to ship or transport interstate meat and meat food products not bearing the mark of Federal inspection, it is necessary that the applicant be a "retail butcher" or a "retail dealer" as defined in the Meat Inspection Act. This means that insofar as his meat business is concerned he is engaged Chiefly in selling meat or meat products to Consumers Only. It is also necessary that he meet applicable

regulatory requirements.

(b) A certificate of exemption authorizes a "retail butcher" or a "retail dealer" to ship or transport interstate each week to Consumers and Meat Retailers—but not to wholesalers—dressed carcasses or fresh meat therefrom not bearing the mark of Federal inspection in an amount not in excess of that stated in the Meat Inspection Act. It

also authorizes him to ship or transport to Consumers Only product other than fresh meat; that is, meat and meat food products which have been salted, cured, canned, prepared as sausage, lard, or other meat food products not bearing the mark of Federal meat inspection. By "consumers" is meant families, hotels, restaurants, clubs, and the like, who utilized the meat or product in the preparation of meals or lunches on their premises.

- (c) If the applicant disposes of meat food products of a kind likely to be eaten without cooking in the home or other place of consumption and which contain pork muscle tissue, it is necessary that the product, or the pork muscle ingredient thereof, be treated to destroy possible live trichinae, in accordance with one of the methods prescribed in section 18.10 of the Federal meat inspection regulations. It will also be necessary that his place meet the sanitary requirements set out in section 8.3.
- (d) No nuisance is allowed on the premises of an exempted establishment, such as fly breeding places, rat infestation, cockroach infestation, rubbish heaps, decomposing animal material, polluted water supply, insanitary drainage disposal, leaking floors, and the like. These requirements are included in the printed matter at the bottom of the application, and signing the application constitutes an agreement to comply with the regulations.

(e) Horse meat or a horse-meat product may not be prepared, handled, or stored in an establishment operating under a continuous of exercises from inspection

under a certificate of exemption from inspection.

4.4 The application should be made out in the exact name desired on the certificate of exemption. On the bottom of the reverse side of the application, the applicant should give the location of his place of business; also, the mailing address if it is different from the location.

4.5 Nonfederally inspected so-called chip steaks and hamburger are considered meat food products and as such can move in interstate commerce to consumers only under a certificate of exemption. They are not considered fresh

meat.

4.6 All establishments operating under a certificate of exemption in a locality where a Branch inspector is regularly assigned for duty should be properly listed by the inspector in charge. The exempted establishments located within the confines of a station or substation should be visited once every 6 months for the purpose of ascertain-

ing any change in the character or the volume of their business which might influence their status or classification, and of determining that acceptable sanitary practices are being followed and that the regulations are being complied with in all applicable respects. Failure to comply with the regulations, and any change in firm name or location, should be promptly reported. Exemption certificates which are no longer required by holders thereof should be recovered and forwarded to the Washington office with appropriate comments.

Whenever a new application for inspection or for a certificate of exemption from inspection is made necessary by reason of a change of ownership, change of name, change in form of organization, or change in location, the effective date of the change should be specified, either on the application or in an accompanying letter. An application for Federal meat inspection or exemption from inspection and the grant of inspection and issuance of a certificate of exemption serve, among other things, to identify the party which is to be held responsible for the maintenance of satisfactory conditions and compliance with the meat inspection regulations at the establishment. Accordingly, it is essential that a change in ownership be recorded at the Washington office as soon as practicable. The management of the establishment or the inspector in charge may inform the Washington meat inspection office of any change in this connection.

As a guide it seems desirable that the three usual types of parties involved in grants of inspection or exemption therefrom be considered, namely, an individual, a partnership, or a corporation. When the business of an individual is purchased or otherwise transferred to another party, it involves such change in management as calls for a new application by the new management. When there is a change in partnership involving any of the partners, the result is a new partnership, and a new application is indicated. So long as a corporation as originally incorporated continues in control of an establishment, changes in the ownership of the shares of the corporation or a change of officers do not effect a change in the identity of the party (the corporation) in control of the establishment, and a new application is not necessary. If a new corporation is formed to take the place of the one to which inspection is granted, or if the business of an individual or

a partnership is taken over by a corporation, or if a corporation is liquidated and the assets are taken over by an individual, a partnership, or another corporation, a new application is required.

The control of the establishment, as mentioned above, has reference to the control of the business on the premises without reference to the ownership of the premises, which may be vested in another party altogether, in which case the party controlling the business at the establishment usually exercises authority over the premises by virtue of a lease from the owner.

When there is to be a change in the ownership at an establishment such as requires a new application for inspection, it should be accompanied with a request from the management holding the current grant for withdrawal of inspection which is in its name. The date on which the transfer is to take effect should be given.

4.8 Information giving the name of each tenant operating in an official establishment, the scope of his operations, and a description of the part of the premises which he occupies shall be forwarded in writing by a responsible official of the firm to which inspection has been granted, through the office of the inspector in charge to the Washington office. Information covering changes with respect to the status of such tenants should also be forwarded in a like manner as may be necessary. The owner or operator of the official establishment holding the grant of inspection is responsible for all operations in the establishment, including those of the tenant, insofar as they affect the maintenance of ingrestion

affect the maintenance of inspection.

4.9 Whenever any drawings showing proposed remodeling or new construction at an official establishment are presented for approval in accordance with section 4.2 of the regulations, they should be forwarded through the office of the inspector in charge. He should examine the proposal carefully to determine whether it is fully illustrated with sufficient information to permit a proper evaluation of the proposal and to determine compliance with inspection requirements. In this connection full use should be made of the sample drawings and specifications contained in the booklet, Information for Applicants for Federal Meat Inspection. If changes are needed, the inspector in charge should endeavor to have them made before sending the drawings to Washington. If these

changes cannot be agreed upon locally, the inspector in charge should forward the drawings to Washington with his comment and recommendations. In the event drawings are received without such information from the inspector in charge, they may be returned to him to be resubmitted in the manner outlined above. If the drawings amend or supersede previously approved drawings, the sheet and/or job number and the date of approval

should be given in the letter of transmittal.

4.10 Approved drawings which are 5 years old, for plants in which inspection has not been inaugurated, are deemed out of date. The inspector in charge should ask the owners for a letter relative to the disposition to be made of the drawings (return or destruction). A copy of the reply should be relayed to the Washington office. If the drawings are to be returned, this may be done without further instructions from Washington after obliteration of the marks of approval. This same procedure should be applied to drawings that have been on file 5 years after withdrawal of inspection.

4.11 Inspectors in charge should review blueprints at least yearly to make certain that only active sets are maintained. When projects have been completed, the Washington office should be notified promptly and also when approved drawings are superseded, the superseded drawings should be removed from the files and destroyed.

4.12 When blueprint files contain numerous paster drawings, it is in order for the inspector in charge to request the establishment to provide blueprints of drawings incorporating all the information contained in the various paster drawings so that the old drawings may be removed from the files.

4.13 When projects have been abandoned, the action indicated for projects 5 years old should be taken im-

mediately.

4.14 Care should be taken to assure that blueprints of drawings submitted for approval are in strict accordance with instructions contained on Pages 3 and 4 of the latest revision of the "Information for Applicants for Federal Meat Inspection" booklet.

PART 5—OFFICIAL NUMBERS AND INAUGURATION OF INSPECTION

5.1 Grants of inspection are forwarded to the in-

spector in charge rather than to the owner or operator of the establishment. The inspector in charge or one of his subordinates should hand the grant of inspection to a responsible official of the establishment at the time inspection is inaugurated. The inspector in charge should not inaugurate inspection until the requirements of section 5.3 of the regulations have been complied with.

- 5.2 (a) Inspectors in charge should report to the Washington office, by letter, official establishments at which no meat or meat food product is being prepared for any one of the following:
 - (1) Transportation in interstate or foreign commerce.
 - (2) Shipment to other official establishments.
 - (3) Sale to governmental agencies.
- 5.3 An inspector in charge should also furnish a separate report for each establishment which may suspend operations or become inoperative, stating the reasons, if ascertainable, for not operating, and the prospect of resumption of operations. Included in the report should be the disposition of personnel affected by the change in operations. Some official establishments suspend operations requiring Federal meat inspection during the summer months and engage in canning fruits and vegetables. Others may engage in the preparation of non-meat foods or experience inactive periods or periods of reduced operations. Inspectors in charge should take full advantage of such opportunities to use up annual leave, thereby reducing to a minimum absences during the busy fall and winter months.
- 5.4 It is imperative that inspectors in charge report immediately to the Washington office any situation at the station such as a strike, flood, fire, or the like, which might result in a work stoppage. The report shall be made by wire and contain the following information:

The date of occurrence.

The probable duration of the situation.

The number of employees affected.

The arrangements that they have made or will make to utilize the employees' services.

The work or leave status of affected employees.

State that they have contacted other USDA activities at their station and whether the services of surplus

employees could be utilized by such agencies on a reimbursable basis.

The inspector in charge will then be instructed concerning the course of action which should be followed. Surplus employees should be kept on standby status until they receive instructions to the contrary.

PART 6—ASSIGNMENT OF BRANCH EMPLOYEES

Many times it is important to those in the Washington office to know whether inspectors in charge are in a duty status or on annual leave. This applies also when an inspector in charge is absent on extended sick leave. At many of the smaller stations, leave relief is furnished from a larger station and the periods of annual leave are arranged for between the relieving station and the inspector in charge requesting leave. We do not want to disturb this method of arranging leave. An inspector in charge should notify the Washington office in advance when he anticipates taking leave. He should allow time enough so that area directors may have this information in planning field visits and for several other purposes. He should also furnish the name of the person designated as acting inspector in charge. This is not intended to interfere with emergency leave when it is not possible to give advance notice. If the inspector in charge has an extended illness and is not able to report, the relief inspector should notify the Washington office, giving any pertinent information that can be obtained.

6.2 The official badge shall be worn over the left breast on the outer clothing of each employee assigned to ante mortem inspection, post mortem inspection, and supervision of processing operations while these duties are

being performed.

6.3 Many inspection positions require the inspector to travel from one location to another in the performance of his duties. Very frequently public transportation is not readily accessible or practical and it becomes necessary for the inspector to use his personally owned automobile for efficient inspection coverage.

The selection of personnel to cover the types of assignments requiring the use of an automobile, which are usually in grade GS-6 and higher, will be based on the availability of a personally owned automobile as well as the willingness of the employee to use his car on a reim-

bursable basis when it is found necessary to do so to cover an assignment. It is anticipated that no difficulty ordinarily will be encountered in filling the relatively small number of assignments in meat inspection requiring the use of a car by employees who have their own automobiles and are willing to use them for official purposes on a reimbursable basis.

It is recognized that occasionally the need for the use of a car may develop after an employee is already occupying a given assignment and that the particular employee might not possess a personally owned automobile or might not be willing to use it for official purposes if he does have one. If this should occur, an effort should be made to solve the problem through an exchange of assignments with another employee of the same grade at the station who is willing to use his personally owned automobile for official purposes in carrying out the assignment. If this kind of arrangement could not be worked out, the next alternative would be the transfer of the employee occupying the particular assignment requiring the use of a car to a position of the same grade level at another station where the need for the use of a car would not exist. Such transfer would be at Government expense since it would be in the interest of the service in that it would place the transferred employee in an assignment in which he could function effectively and would make it possible to fill the assignment vacated by him through the promotion of another employee willing to use his personally owned automobile for official purposes.

6.4 When inspection assignments require that an inspector use a government or personally-owned automobile in the performance of official duties at more than one location, inspectors in charge should work out with the official establishments involved suitable arrangements for parking the automobile, either on the premises of the establishment or within a reasonable distance of the

establishment.

PART 7—FACILITIES FOR INSPECTION

7.1 The question of "Due Notice" to the inspector in charge regarding shipment of product from an official establishment must be worked out locally according to the needs of the establishment as well as of the inspection service. When it is known that the operating practices at

an establishment meet acceptable standards relating to the protection of product from contamination, the inspector in charge may permit shipping and receiving of U. S. inspected and passed product during hours when an inspector is not on duty, subject to occasional unannounced checks to observe whether standard practices are being followed. Incident to such shipping, it is usual to permit some breaking of carcasses into quarters or primal cuts each bearing the mark of inspection. Unmarked product should be packaged and labels bearing the marks of inspection should be applied to the unmarked product only while an inspector is on duty although the product so prepared may be shipped after the regular hours of inspection.

- 7.2 In connection with Section 7.4 of the regulations the following days have been administratively determined as holidays: New Year's Day, Washington's Birthday, Memorial Day, Independence Day, Labor Day, Veterans' Day, Thanksgiving Day, and Christmas. Notice of other holidays will be given from time to time.
- 7.3 (a) Questions have arisen from time to time concerning assignment of inspectors when the requirements for inspection extend over a period of time in excess of 8 hours. It is realized that in most cases the volume of operations does not remain constant throughout any given period of time. Obviously, the inspection requirement has a direct relation to the volume and kind of operations which require inspection supervision.

(b) It is the responsibility of the inspector in charge to so utilize the inspectors assigned to his station as to most effectively provide supervision depending on the kind and volume of operations conducted at any particular

time.

(c) Staggering the hours of inspectors is a proper procedure to be followed by an inspector in charge to effectively cover his inspection responsibility. However, where an inspection responsibility requires the assignment of more than one inspector and there is no change in the inspection responsibility over a period beyond 8 hours, there should be no change in the number of inspectors assigned to cover such an operation at any time during the entire period.

(d) The hours of duty for inspectors should be determined by the inspector in charge on the basis of the

operating needs of the station to perform in the most efficient manner the duties required by current plant operations. Decisions with respect to overtime services shall be handled precisely as though payment for overtime services were made entirely from public funds. Each inspector who is required to work overtime should be justly compensated for such work. On the other hand, it is the duty and responsibility of each employee of the Branch to see that time records accurately represent hours of duty and that there are no unnecessary overtime charges. The recording of an employee's daily hours of duty should not be influenced by practices followed by employees of official establishments who may be operating under contracts with the employer which specify conditions of employment which are not applicable to employees of this Branch.

7.4 Time reasonably employed by inspectors in making out reports connected with post mortem examination may, when involving overtime work, be compensated for on an overtime basis. Such overtime work is part of the inspection service for which the official establishment shall pay the Secretary of Agriculture in accordance with section 7.4 of the regulations. No overtime compensation

is paid for work involving less than 15 minutes.

7.5 Inspectors in charge and others with supervisory responsibility are expected to advise Branch employees under their supervision in matters relative to personal safety and the control and prevention of accidents. It is not expected that Branch employees will initiate safety programs involving the employees of official establishments, but Branch employees in supervisory capacities should include attention to safety factors when giving advice to establishments concerning plant facilities.

7.6 Information relative to details of types of equipment and facilities for the sanitary conduct of operations and efficient performance of inspection should be obtained from the pamphlet, "Information for Applicants for Fed-

eral Meat Inspection."

PART 8—SANITATION

8.1 As just mentioned, reference should be made to the booklet, "Information for Applicants for Federal Meat Inspection," concerning sanitary construction and equipment.

8.2 (a) Inspectors in charge are expected to take such action as may be necessary to assure that only potable water from an approved supply is used in edible products departments of establishments and in areaways connected with such departments.

(b) Before the water supply is accepted incident to granting inspection at an establishment full consideration should be given to its source and the distribution

system within the plant.

(1) Water from an approved public supply may be regarded as acceptable as delivered to the establishment.

(2) When the establishment uses a private water supply a report on the bacterial quality of the water taken inside the plant should be required at least every 6 months or at any other time the inspector has reason to question the condition of the water. The report should cover an examination of water, taken at a location specified by the inspector and examined by the local health agency having jurisdiction over the water supply in the area. Such examination of the water should be requested by the man-

agement of the establishment.

(c) Water may become unpotable as it is distributed in the plant. Therefore, inspectors should give regular attention to the condition of all storage facilities and pipe lines in the establishment. Hazards such as dead ends of pipe lines, improper cross connections between potable and unpotable water and the absence of anti-back siphonage devices should be eliminated. In those cases where the use of non-potable water is permitted for certain purposes, its use must be accompanied by adequate safeguards to assure that it can not possibly come in contact with edible product or pollute the potable water supply.

8.3 (a) Materials which have been accepted for use in

official establishments for general cleaning:

(1) Sodium carbonate (soda ash, sal soda)
Sodium hydroxide (caustic soda, sodium hydrate)
Sodium metasilicate
Sodium bicarbonate
Trisodium phosphate
Sodium metaphosphate
Tetrasodium pyrophosphate
Tripolyphosphates
Soap

Suap Lime Synthetic detergents (wetting agents)
Borates (if with strong alkalis and not in an excess of 5%)

Detergents for use in official establishments should be restricted to those which have been passed by the meat inspection laboratory. Soaps that are heavily perfumed and strong smelling disinfectants or deodorizers are not permitted. Only approved liquid soap is suitable for use in slaughtering and other meat handling departments. Other soap approved by the meat inspection laboratory may be used in dressing rooms.

(2) Sanitizing agents:

Sodium hypochlorite

Chloramine T

Quaternary ammonium compounds

Aqueous solutions of iodine and certain types of non-ionic synthetic detergents

Hydrogen peroxide

Aqueous solutions of special agents may be used as sanitizing agents and mold inhibitors on equipment, floors, walls, and ceilings of edible product departments of official

establishments in accordance with the following:

Solutions of these compounds may be used on edible product equipment and on floors, walls, and ceilings only (a) after the usual cleaning operations, and (b) after removal of all meat from the room or compartment unless it is effectively protected from contact with the solution. The application of such sanitizing agents must not be used as a substitute for thorough and effective cleaning. Residues must be removed from edible product equipment by thorough rinsing with clean water before the equipment is again used for handling product. It will not be required, however, that the residues of the compounds be washed from floors, walls, and ceilings unless, in the judgment of the inspector in charge, the presence of such residues is objectionable.

The strength of the solution of quaternary ammonium compounds customarily used does not exceed 1 ounce of the 10-percent aqueous solution, or one-tenth ounce of the dry chemical, to 4 gallons of water. Caution should be exercised to avoid bringing the concentrated solution or the dry chemical into contact with the eyes or nasal passages because of their extremely irritating effect on mucous membranes. Solutions of sodium hypochlorite and chlora-

mine customarily used do not contain more than one-half of 1 percent available chlorine (5,000 parts per million).

(3) Acid cleaners for removing corrosion and rust (not to be used where contact with exposed product may be made).

Sodium bisulfate

Phosphoric acid

Citric acid, lactic acid or other harmless organic acids

Hydrochloric acid (muriatic acid)

(b) The following materials have not been accepted for use in official establishments for general cleaning:

Borates (unless with strong alkalis and then not

over 5% of mixture)

Sulfites

Oxalates

Fluorides

Fluorsilicates

Glycolic acid

Chemicals interfering with inspection because of

strong odor

The elimination and destruction of vermin in and around meat packing plants is vital to the maintenance of good sanitation. In combating any pest, two principles should always be followed: (a) Prevent their breeding, and (b) prevent their entrance into establishments. In nearly all cases the owners of adjoining properties and the local health authorities will be glad to cooperate in the destruction of vermin and in developing a program for vermin control. The management should endeavor to obtain such cooperation. Any place that will afford food, water, and a hiding place is a potential breeding place for vermin. The most common of such places are manure piles, trash piles, garbage dumps, accumulations of paunch and stomach contents, and hog hair. Regulations do not permit such accumulations on the premises of official establishments. The cooperation of the local health authorities should be solicited by the management in eliminating such breeding places from the vicinity of meat packing plants.

Buildings and equipment of a kind that harbor vermin should be repaired or replaced so as to eliminate all breeding and hiding places. Walls, floors, and ceilings which have been tunneled by rodents should be replaced with

verminproof material, such as cement or brick. Tunnels may be blocked with heavy hardware cloth, glass, metal, or other verminproof material. Stone and brick walls should have the joints pointed up flush and smooth, and all cracks, crevices, and openings around pipes, etc., should be sealed tight. Wooden walls, ceilings, and partitions should be of tight-fitting material which will not permit the entrance or hiding of roaches and other vermin. Floor drain strainers should be in good repair and should remain in place so as to prevent the entrance of rats through drainage lines. Dressing rooms and lunch rooms should be of such character and so equipped and maintained as to eliminate any breeding or hiding places. Lockers should be examined regularly by the management and inspectors to see that they are kept clean and free from vermin. Overcrowding (more than one person to a locker) should not be permitted, since it is difficult to keep overcrowded lockers clean and free from roaches. Dry storage rooms should be kept neat and clean and the product stored should be so arranged that the room can be kept clean and free from harbors for vermin. It is desirable for the stored material to be arranged so that as the supplies are moved the area can be thoroughly cleaned. Most dry stores can be placed on racks having a clearance of at least 12 inches from the floor and so arranged that the floor beneath the racks can be readily cleaned. If racks are not used, the dry stores should be closely piled so as to eliminate any possibility of runways or harbors for rodents. All openings (doors, windows, ventilators, skylights, and other openings) which may admit rodents, birds, flies and other insects should be effectively screened and the screen should be kept closed and in good repair. Fly traps when used should be so located that they will not attract flies to doorways where they may enter the buildings but should be some distance from such doorways.

When vermin do gain entrance to official establishments in spite of vigorous attempts to keep them out, certain eradication methods are permitted. When such methods are necessary, it is an indication that the preventive measures just mentioned have not been entirely successful and the management and inspectors should determine where they have failed and act to prevent a recurrence. It takes ingenuity to cope with all of the various kinds of vermin.

The goal of complete eradication of vermin in official establishments is definitely possible and this goal should be attained.

8.5 The following is a recapitulation of permitted methods for the control of vermin by the use of chemicals:

(a) Fumigants

(1) Hydrocyanic acid gas: Fumigation with this gas is very effective for all types of vermin. Since this gas is extremely poisonous to man as well as to vermin, permission for its use must first be obtained from the inspector in charge and a competent, experienced person should be placed in direct charge of operations. Certain foods have been found to absorb the gas; therefore, when foods other than meat are to be exposed to the gas, prior permission for the fumigation should be obtained from the local health authorities. Exposed meats or packaged meats need not be removed from the rooms being fumigated. After fumigation the rooms should be well ventilated before inspectors or workmen enter the rooms. Ventilation must also be sufficient to assure complete removal of the gas from the surface of food products. Hydrocyanic acid gas may also be employed to eradicate mites, skippers, ham beetles, and the like from infested hams and like products. Follow this by removal and condemnation of infested meat.

When liquid hydrocyanic acid is used, the equipment for releasing the gas should be so constructed and controlled as to positively prevent any of the liquid hydrocyanic acid from contaminating any product, and only the gas should be permitted to escape from the fumigating equipment.

(2) Methyl bromide gas: Fumigation with this gas is permitted on the same basis and with the same restric-

tions as were set forth for hydrocyanic acid gas.

(b) Insect Sprays

(1) Kerosene, deodorized kerosene, or other acceptable solvent solutions of pyrethrum extracts, rotenone, allethrin (allylhomolog of cinerin I), organic thiocyanates or lethanes and/or solutions containing not more than 1% of piperonyl butoxide, N-propyl isome, sulfoxide, N-octyl dicycloheptane dicarboximide (MGK 264, etc.) may be used as sprays for the elimination of roaches, flies and

other insects provided exposed meats are first removed and the premises cleaned by thorough washing after the completion of the spraying operation. These insecticides may also be used in an aerosol bomb in solution containing up to 5% of these chemicals collectively or individually under the same circumstances. Warning! Sprays containing organic thiocyanates (lethane, thanite, etc.) are quite toxic to animals and man, and when absorbed through the skin, ingested, or inhaled may cause serious illness. It is therefore considered wise, especially for employees regularly engaged in this work, to wear properly designed masks to prevent inhaling the spray and clothing which will prevent contact of the chemical with the skin.

(2) The residual action of DDT, chlordane, lindane, malathion and more concentrated solutions of some other insecticides is usually effective against flies and the use of these solutions around the outer premises and inedible products department has been satisfactory. A liberal application of these preparations on fences, the walls of the scale houses, inedible products loading docks, boiler rooms and the like, affords opportunity for flies attracted to the establishment to come in contact with the insecticide material and be killed before they can enter the edible products department. Fresh solutions of these materials apparently give best results.

By contrast with this satisfactory use of these insecticides, it has been found that their application to walls, ceilings, and equipment in rooms where exposed meat or product is handled leaves a deposit of insecticide which can not be readily removed and which continues to act rather slowly against flies or other vermin that are overcome or killed while operations are in progress and fall into the product. As the action of the insecticide is continuous, there is no practical way in which the exposed product can be protected from contamination with dead insects. Therefore, it has become necessary to limit the use of these insecticides to places where exposed meat is not handled.

(3) So-called knock down sprays containing pyrethrum extracts, and other materials not having a residual killing action may be used in places where exposed meat is to be handled according to the restrictions outlined above. As these insecticides act very quickly, it is practical to kill all the flies in the room and with a minimum of labor wash down the excess insecticide and any flies that have been

killed, before exposed meat is brought into the room. This use of the "knock down sprays" in addition to the application of residual acting insecticides in the manner already outlined should control flies on premises that are kept clean and free of fly breeding places.

(4) The use of 1½ fluid ounces of emulsifiable 50 percent strength malathion added to 5 pounds of granulated sugar and thoroughly mixed with a small amount of food coloring to give a distinctive color to the mixture has been found to be a very satisfactory bait material around livestock pens and inedible departments of official establishments. Care should be taken in placing the bait so that it is not located where it could be ingested by livestock.

(5) Deodorized kerosene solutions of pyrethrins or allethrins or a combination of the two with piperonyl butoxide containing not more than 1 percent of piperonyl butoxide (butyl carbitol, 6-propyl piperonyl ether) with or without other approved insecticides may be used in the form of an aerosol in all departments, in accordance with

the restrictions applicable to pyrethrum extracts.

(6) Solutions containing more than 1 percent of piper-onyl butoxide, N-propyl isome and N-octyl dicycloheptane dicarboximide (MGK 264, etc.) and solutions of chlor-dane, lindane (gamma isomer of benzene hexachloride), methoxychlor, and malathion with or without other approved insecticides may be used with the limitation applicable to DDT, that is, in places outside of edible products departments.

(7) Allethrin (allyl homolog of cinerin I) is acceptable on the same basis as pyrethrin, that is, in deodorized

kerosene solution or other approved carrier.

(8) N-propyl isome (di-n-propyl maleate isosafrole condensate) is acceptable on the same basis as piperonyl butoxide.

(9) N-octyl dicycloheptane dicarboximide (MGK 264, etc.) is acceptable on the same basis as piperonyl butoxide.

(c) Insect Powders

(1) Any of the dry insecticidal compounds listed above when mixed with dry inert material are acceptable for use as an insect powder in accordance with the restrictions applicable to the same insecticide when used in insect sprays.

(2) Sodium fluoride, powdered pyrethrum, derris and cube roots, borax and boric acid, and powders containing organic thiocyanates or DDT in an inert base: These substances may be used for the elimination of roaches under the same restrictions governing the use of sprays. Sodium fluoride powder shall be definitely colored blue or green.

(d) Rodent Baits

- (1) Barium carbonate: Baits containing barium carbonate must be solid and sufficiently hard that they cannot be broken up and scattered about, or must be soft and placed in a dish or other receptacle, protected by a box or cage provided with openings sufficiently large for rats to enter but not large enough to permit removal of the dish. Baits shall not be placed in edible products departments until after operations have been ended for the day. Strict account must be kept of the location and number of baits set out. All uneaten baits must be gathered up and destroyed before operations are begun the next day. Operation shall not be permitted until all baits have been gathered up or accounted for. Baits must not be placed in dry salt cellars. They may be placed in other departments containing exposed meats, but care must be taken that they are so placed as to prevent contamination of the meat. The entire supply of barium carbonate and prepared baits must be kept in a safe place designated by the inspector in charge. The use of this poison, including the preparation and placing of baits, must be under the direct supervision of a Branch inspector. No condition which may be a source of danger to human health or which is not consistent with proper sanitation or inspection should be permitted to develop.
- (2) Red squill: This substance mixed with proper bait is highly toxic to rats. Although comparatively nontoxic to larger animals, it must be used under the same restrictions as barium carbonate.
- (3) Antu (alphanapthylthiourea): Antu is permitted to be used in edible products departments in accordance with the instructions for barium carbonate and red squill. Extensive experimentation with Antu in official establishments and elsewhere has shown this rodenticide to be an effective agent for killing the common gray-brown Norway rat, and it is apparently of low toxicity to man. The Norway rat is usually the only variety of rat found

in meat-packing plants, except for a few places in the

southern part of the United States.

The disadvantages of this chemical are its comparative nontoxity for other types of rats and its property of imparting a tolerance to rats which eat less than a killing dose. The development of tolerance to this poison by Norway rats is so rapid that Antu cannot be used effectively in the same locality at intervals of less than a month. If application of a rodenticide is necessary within this interval, the use of red squill or barium carbonate is recommended.

Antu is a gray powder insoluble in water. It kills rats by causing an accumulation of a large volume of fluid in the organs of the thoracic cavity. Death usually occurs in

12 to 48 hours.

- (4) Rodent baits composed of warfarin (3-(alpha-acetonylbenzyl)-4-hydroxycoumarin) (compound 42) corn meal or other acceptable foodstuff may be used on the same basis as red squill. Bait composed of foodstuff and warfarin, red squill, or Antu may be left in rooms containing exposed meat provided the layout has been approved by the inspector in charge and the bait is finely divided and is contained in substantial locked boxes fixed to the floor and so constructed as to prevent removal of the bait from the outside. Warfarin produces internal hemorrhages in rodents and other warmblooded animals and must be eaten over a period of 4 to 10 days to produce a lethal effect. The physiological action of this chemical is similar to that of the dicumarol widely used in medicine as an anticoagulant for blood, although warfarin produces a considerably greater effect than does dicumarol.
- 8.6 (a) Samples of insecticides and rodenticides intended for use in official establishments need not be submitted to the Washington meat inspection laboratory. It is the responsibility of inspectors to see that each preparation contains only permitted materials and that the use is in accordance with Meat Inspection requirements. Particular attention should be given materials used by exterminators to be sure that they are acceptable and correctly used. Manufacturers of these materials are required to show a list of active ingredients on the label. Insecticides and rodenticides in containers not showing this information on the label should not be accepted.

(b) The following list of permitted insecticides, rodenticides and fumigants summarizes those materials which have been approved:

Insecticides

(1) May be used in all areas and where product is handled provided exposed product is first removed and the equipment cleaned by thorough washing before operations are resumed.

Deodorized kerosene solutions of:

Pyrethrum extract

Rotenone

Organic thiocyanates (lethane, thanite)

Pyrethrins

Allethrin (allyl homolog of cinerin I)

1 percent or less of the following insecticides, singly or in combination: Piperonyl butoxide, N-propyl isome (di-N-propyl maleate isosafrole condensate), N-octyl dicycloheptane dicarboximide (MGK 264, etc.) or sulfoxide. Up to 5 percent of these chemicals collectively or individually may be used in an aerosol bomb solution.

(2) Use limited to areas where exposed product is not to be handled:

Deodorized kerosene solutions of:

DDT

Chlordane

Methoxychlor

Lindane (gamma isomer of benzene hexachloride)

Malathion

More than 1 percent of piperonyl butoxide and N propyl isome (di-N-propyl maleate isosafrole condensate), N-octyl dicycloheptane, dicarboximide (MKG 264, etc.) or sulfoxide

(3) The following substances when mixed with dry inert materials may be used as insect powder for the elimination of roaches, under circumstances which absolutely proclaim to the standard proclaim.

solutely preclude contact with product:

Sodium fluoride (must be definitely colored green or blue)

Borax

Boric acid

Derris and cube roots

Powdered pyrethrum

Powders containing organic thiocyanates (lethane,

thanite)

DDT—Insecticide powder containing DDT must not be used in any area where edible product is handled

Rodenticides

(1) Must be used under circumstances which absolutely assure no contact with product:

Barium carbonate

Red squill

ANTŪ (alphanaphthyl thiourea)

Warfarin

2-pivalyl—1,

3 indandione (pival, etc.)

Fumigants

(1) Must be used only under supervision of licensed and experienced operator—extremely dangerous. Ventilate premises thoroughly:

Hydrocyanic acid gas. Methyl bromide gas.

- (c) The use of insecticides, rodenticides and fumigants containing materials other than those listed above should not be permitted.
- (d) When proposals to use other insecticides, rodenticides or fumigants are received they should be forwarded to the Washington office for consideration. Proposals to use accepted materials in a manner other than that which has been outlined should also be forwarded to the Washington office.
- (e) Because of the extremely high toxicity and physical characteristics (odorless, colorless and tasteless) of 1080 (sodium fluoroacetate), its use on the premises of official establishments has not been accepted. Compounds of arsenic, strychnine, thallium and yellow phosphorus are also not permitted due to their extreme toxicity.

8.7 Storage compartments of "snow-ice," "flake-ice," "pac-ice," and similar equipment should be lined with stainless steel or other rust-resisting metal. The metal should be of sufficient thickness to withstand repeated striking of a shovel without puncturing or perforating the lining. Suitable perforated, rust-resisting, and remov-

able metal drainage plates should be provided in the bottom of the ice storage compartment, and frequent attention should be given to these plates, the space underneath, and the draining line to assure their cleanliness. Some of the equipment used for the production of various forms of flaked ice is so constructed that the water resulting from the melted ice is collected in a space below the ice storage compartment. Such water may not be used for the production of ice nor should it be permitted to find its way into the potable water lines or supply. The drainage line from the bottom of such equipment should be so installed that the water resulting from the melted ice is directed to the drainage system without flowing over the floor. There is no objection, of course, to prechilling the water intended for the manufacture of ice by circulating it in closed coils submerged in the cold water beneath the storage compartment.

8.8 Branch employees must not smoke while on duty or while in rooms where meat or product is prepared or handled. Establishment employees must not be permitted to smoke while working with exposed product. If the management of the establishment has restrictions pertaining to smoking, such requirements shall also be observed by Branch employees.

8.9 Spitting on the floor should be vigorously dis-

couraged.

8.10 Fine wire brushes or steel wool shall not be used on product, or on equipment which will come in contact with product, because of the danger of contamination of the product with fine particles of steel.

8.11 Equipment acceptable to the inspector in charge should be provided wherever necessary in coolers, shipping rooms, cutting rooms, and the like for receiving trolleys, gambrel sticks, and smoke sticks for transfer to a suitably equipped place for cleaning before reuse.

8.12 The use of magnetic traps has demonstrated that there is significant contamination of meat with particles of iron from various sources. Samples of iron particles removed from chopped meat products by magnetic traps consist of nails, pieces of wire, pieces of flat staples of the type used to close fiber boxes, and miscellaneous small pieces of metal including bits of broken bearings, grinder plates, and washers. Therefore, the importance of constant vigilance and adequate inspection procedures

to preclude the contamination of meat by foreign materials during its handling and processing must be emphasized. The magnetic trap is, of course, no substitute for such precautions. The magnetized portion (core) of the trap is constructed of iron whereas the threaded connecting nipples are made of stainless steel. The iron portion becomes darkened after a period of use. The darkening is not objectionable but to prevent rusting of this portion, the trap should be thoroughly dried after cleaning and given a light application of paraffin oil.

8.13 The following possible sources of contamination are given to aid inspectors in carrying out their respon-

sibility to prevent the contamination of product:

The edges of shovels used in handling product should be ground as often as may be necessary to prevent the rolling edges from crumbling into product. Cast alloy shovels made of the softer metals require close attention.

- (b) The staples from metal stitching machines represent a dangerous source of contamination. The operation of the machines near open containers of product should not be permitted. Metal-stapled containers and wirebound boxes of product should be opened with great care.
- (c) Metal tag fasteners and wood and metal skewers should be completely removed from carcasses prior to cutting and boning. Tag fasteners of a design which can-not be readily removed from the meat should not be permitted.
- (d) Metal trucks and other equipment that have been repaired or altered by welding should be carefully examined to see that they are free from metal beads and pieces of slag before being placed in use. Equipment having poor welds from which particles of metal may become loosened and enter product should be rejected.

(e) Care should be exercised in opening slack barrels and other containers closed with nails to see that nails

and wood splinters do not enter the product.

(f) Attaching paper or burlap barrel covers by means

of small staples is not permitted.

(g) Worn can openers, metal cut by friction, broken or worn parts of equipment, wire used to suspend overhead equipment, loose hooks on cooler racks, metal strapping from fiber containers, and broken wire from bacon hangers and belly spreaders are all sources of metal contamination which should be given careful attention.

(h) Use of containers or equipment made of enamelware is not acceptable for any purpose in connection with

processing of product.

(i) Unprotected light bulbs should not be suspended directly over choppers, grinders, mixers, and similar equipment. Burned-out light bulbs should be placed in rubbish containers immediately on removal from the electric fixture. Special care should be given to the disposal of fluorescent tubes, which may contain a poisonous gas. Such tubes should not be broken in an edible products department of the establishment. Milk, beverage, and other glass bottles should not be permitted in processing departments. Broken or cracked window panes should be repaired promptly.

(j) Care should be taken that all scaling paint, dust, and flaking rust are scraped from overhead structures in edible products departments. The handling or storage of products in areas where condensation is forming on overhead structures and dropping on the product should not be permitted. Condensation can be effectively controlled by circulation of heated air in nonrefrigerated rooms. In coolers, insulation of walls or ceilings, or the application of heat by means of very small steam lines near the ceiling, can control condensation without seriously inter-

fering with refrigeration.

(k) Walls or posts constructed of masonry materials and which are not protected by suitable guard rails may be bumped or scraped by trucks or other containers and

thus contaminate product.

(l) All equipment in which lubricating grease or oil is used should be examined carefully to make sure that there is no possibility that the lubricating material may get into the product. Water forced under a linking machine becomes contaminated with the heavy lubricating machine grease which has dropped onto the table from the working parts of the machine. To prevent contamination of sausage by this grease and water combination, the linking machine may be placed in a stainless steel pan at least 2 inches deep, the depth of 2 inches being necessary to prevent the pan from filling with water when the layers of sausage are moved forward. Inspectors should observe carefully the operation of sausage-linking ma-

chines. If the possibility of contamination of products by lubricants exists, the establishment should be required to take suitable corrective measures without delay. The use of the pan as suggested appears to be one acceptable method of eliminating this type of contamination.

- (m) The arrangement of the sprays in Jourdan-type cookers may be such that water strikes the roller assembly of sausage cages or smoke trees and washes grease or oil down onto the product and into the water reservoir at the bottom. The sprays may be lowered, or a splash shield may be placed on both sides of the rail and extended down from the top of the cabinet a sufficient distance to prevent the rollers from being sprayed with water.
- (n) Carcass shroud cloths should be thoroughly rinsed following washing to assure the removal of all soap or detergent compound.
- (o) Inspectors should assure themselves that containers and coverings for product, including metal lard drums which may have a coating on their inner surface, are acceptable for use. Slack barrels and similar containers should be carefully examined for wood splinters and lined with suitable material to avoid contamination with splinters. When paper is used to line containers, it should be of such quality that it will not disintegrate when in contact with meat and juices. All paper adhering to the outer surface of frozen blocks of meat should be removed before the blocks are cut. In some cases, copper coated staples have been used in fiber containers. When in contact with meat, these staples cause a green discoloration which should be removed prior to use of the product.
- (p) In opening burlap- or muslin-covered slack barrels care should be taken to completely remove the cloth covering before puncturing the protective paper covering under the cloth.
- (q) Cloth, paper, or other containers of meat products or of ingredients such as sugar or spice should be dumped in such a manner that lint or dirt on the outer surface shall not contaminate the product.
- (r) The wearing of badges, identification cards, campaign buttons, and similar articles on outer clothing by persons who handle products should be discouraged. However, similar articles necessarily worn must be so at-

tached that their accidental inclusion in product will be

definitely precluded.

(s) Frequent examination must be made of multipleneedle pickle-injecting equipment. When a needle is missing from the device, a diligent search must be made until

the broken needle is located or accounted for.

(t) The pusher bar of some frozen meat choppers feeds frozen blocks of meat to the chopping blade. There is a space of a quarter inch or more between the pusher bar and the bed of the chopper. During the day's operation, particles of meat are picked up and retained in this space. Customary washing and steaming does not remove these particles completely. The pusher bar should be removed at the close of a day's operation and thoroughly cleaned. Since both the pusher bar and chopper bed are usually castings and susceptible of retaining odors, the pusher bar should be left unassembled and allowed to air overnight.

(u) The hollow aluminum emptying plug in some silent cutters has a pan in the bottom and is held in place with small stove bolts seated in the body of the plug. At times, these become loose and disappear. Continued use of the chopper causes the meat juices and particles of meat to get into the plug proper and become very unsanitary. The pan can be removed leaving the opening, which can then be properly cleaned. The packing nut at the top has a gasket and cap to keep grease out of products. To make this packing nut more secure, it is suggested that cap screws be used, and the thread ends drilled permitting them to be held in place by a wire, thus eliminating any

chance for metal to get into meat products.

(v) In some elevator shafts moisture from the threshold of the floor above frequently falls into the trucks of meat being moved on or off the elevator at the lower levels. A method devised to eliminate this condition has proved very satisfactory. A channel is first cut into the vertical face of the floor support pitched to the corner of the shaft. Then a gutter of heavy steel is attached in the opening with lag screws, and cemented in place. This gutter, being open, can be readily cleaned. It conveys all moisture to a pipe in the corner of the shaft which discharges into the drain in the pit.

(w) The stainless steel strips on the base of some bacon-slicing machines do not fit tightly, and some fat and

meat juices work their way under the strips and become sour or rancid. These strips can be removed and the area under them cleaned. The strips can then be welded to the base with a stainless steel weld which is ground smooth and polished. Also the guide rod for the meat holder on some bacon-slicing machines has a recessed area at one end which accumulates a certain amount of fat and grease. The guide rod should be removed as often as necessary to maintain proper sanitation, and the recessed area should be properly cleaned daily.

- (x) The construction of gate valves used on the lower openings of edible rendering tanks permits passage of a considerable amount of meat tissues, bone fragments, fats, and the like into the valve bonnet. To assure sanitary maintenance of this type of gate valve, it is essential that some method of regular (daily) flushing of the inner parts of the bonnet be available. Furthermore, the valves must be completely dismantled at such periodic intervals as found necessary for thorough cleaning and inspection. Several acceptable methods of installing openings into valve bonnets for daily flushing with hot water and/or steam have been devised. Combination steam and hot water lines may be permanently connected to the bonnets; however, if this is done adequate precautions to prevent back-siphonage into the potable water supply are necessary. It is expected that gate valves used for the purpose described above will be provided with similar facilities for daily cleanout and a program of dismantling as often as found necessary initiated without delay.
- (y) It has been found that the staining of product through contact or friction with aluminum can largely be avoided by the use of anodized aluminum hooks, rails, pipes and sheets which are now available from most aluminum fabricators. The anodic coating may erode in time and anodizing becomes necessary to prevent contamination of product. The use of hard metal hooks, such as galvanized iron or stainless steel or aluminum rails may cause abrading of the rail surface and the deposit of small particles of metal on the product.
- 8.14 Cutting boards should be as small as is practical for the purpose. Such boards should be kept smoothly planed and removed daily for cleaning on all surfaces.

Cutting boards made of a synthetic rubber material have been found very satisfactory in many locations.

8.15 Sawdust should not be used on benches or equip-

ment where it may contact product.

8.16 Properly equipped tables, sprays, etc., should be furnished wherever necessary for cleaning product that

has accidentally become soiled.

8.17 Wooden second-hand containers which have been reconditioned prior to receipt at an establishment should not be accepted for use since it is impossible to give the inspection necessary to determine fitness for use as contemplated in paragraph 8.12 (a) of the Meat Inspection Regulations. Wooden containers are frequently used in industry for various chemicals and insecticides, some of which are highly poisonous. Containers previously used to hold food may contain vermin excreta and decomposed material consisting largely of food spoilage organisms and dangerous toxins. As the complete removal of dangerous substances cannot be accomplished with certainty from containers made of porous material such as wood, such containers which show evidence of dangerous contamination should be rejected.

The reconditioning of second-hand containers made of non-porous material, such as steel drums, can be permitted without prior inspection; however, inspectors should examine such containers very carefully to determine that effective cleaning and preparation for use has

been accomplished. The inspection should include:

(1) wiping the inner surface of the container with a clean white cloth or towel to determine whether all for-

mer contents have been removed.

(2) looking for a spotted appearance of the inner surface which may be an indication that the new lining will not adhere properly over old linings improperly cleaned

or rusty surfaces.

(3) looking for dents in chime and sides of drum. These areas should be free from damage which would interfere with satisfactory cleaning and inspection. In determining the acceptability of steel drums, inspectors should apply the usual product container requirements for cleanliness and absence of probable sources of contamination. The acceptability of the coating on the inner surface of any metal container can be determined by obtaining from the management the name of the lining

material; name and address of the firm which applied the coating and forwarding this information to the Chemical Control Section, Meat Inspection Branch, Washington 25, D.C.

8.18 Inspectors should give close attention to the reconditioning of wooden curing vats. After emptying, the vats should be flushed with water and removed from the curing department. All slivers, blisters, badly discolored wood and ridges should be removed from the inner surface of the vat and a smooth clean inner surface should be obtained. The outer surface of the vat should be smooth with the hoops free from corrosion. Badly rusted hoops should be replaced with new galvanized or stainless steel hoops. After the inner and outer surfaces of the vat have been properly smoothed, it should be flushed with clean water and steam to remove particles of wood and dust. A suitable truck should be used for returning the vats to the curing department since rolling the vats on the floor results in contamination of the outer surface and top of the vat.

8.19 Paraffined paper cups have been used to close the bung hole of reclaimed or second-hand barrels and tierces to prevent the contamination of the interior. The usual experience is that the wooden bung stopper does not remain in place unless driven in tightly. When paraffined cups are inserted into the bung hole immediately after the barrels or tierces are cleaned and silicated, the containers may then be sprayed or hand-painted without danger of contaminating the interior. They are also protected against dust, insects, etc. The cup remains securely in place and is easily removed when the container is to be filled.

8.20 All employees working in departments where exposed product is handled should wear head coverings to

prevent hair from falling into the product.

8.21 Leather aprons, wrist guards, and the like used as safety devices for employees engaged in cutting or boning meat must be maintained in a clean and sanitary manner. To assist in maintaining leather aprons in satisfactory condition, a clean, washable cloth covering may be used over the apron.

8.22 Corrosion on galvanized metal equipment may be prevented by frequent thorough cleaning followed by a light application of colorless, odorless, paraffin oil. Equip-

ment which is to come in contact with product should be washed before it is used, in order to remove excess oil.

8.23 Unnecessary pipes, wires, strings, and other material should be removed from edible product departments, and no trash should be allowed to accumulate.

8.24 Sausage-grinder plates of the so-called reversible constructed with removable bushings sleeves. This permits the accumulation of a considerable amount of meat, fat, and meat juices on the inner surfaces of the various demountable parts during grinding operations. If not removed frequently, the accumulation of material becomes decomposed and foul-smelling. Therefore, it is required that the parts be completely demounted

for cleaning daily.

The worm or feeder screw of most meat grinders is cast, and the center consists of a hollow core about 8 to 12 inches in length and 3 to 4 inches in diameter, depending on the size of the worm. In some instances the hollow core is filled with cement at the factory. It is very important that close examination be made of such equipment to detect any crack, flaw, or faulty construction that would result in an unsanitary condition. There are cases where putrid material has accumulated in the core

having entered through small cracks in the screw.

8.25 Covers to clean-out openings of sausage-stuffing machines should be removed at frequent intervals and the interior of the stuffers examined to determine the need for cleaning. The frequency with which the covers are removed and the interiors examined and cleaned depends upon the kind of product handled and whether the particular stuffer is used daily. Particular attention should be given to the condition of the interior of stuffers. If particles of meat, fat, liquids, and the like are found, this will indicate that the gasket is worn, defective, or improperly adjusted, and permits material to by-pass the piston. When such a condition is found, the piston should be "pulled" in order that proper adjustment can be made and the gasket replaced if necessary.

The frequency with which pistons should be "pulled" will depend largely upon the condition found on the interior of the cylinder as observed through the clean-out openings and from the top when the piston is in the "Down," or loading, position. The kind and consistency of product for which the stuffer is used will have a bearing on the frequency of pulling the piston for thorough. cleaning. Thus, a stuffer used for a more or less stiff and coarse product would not ordinarily need to have the piston pulled so often as a stuffer used for a soft or pastelike product, providing the gasket, piston, and cylinder walls are in good condition. When pistons are "pulled" they should be examined for (a) any appreciable degree of deterioration of the gaskets or any detached fragments that might find their way into product; (b) accumulation and possible decomposition of product beneath the gasket or in the space between the piston and the cylinder wall; and (c) any other insanitary condition that might be present. Attention should also be given to a possible accumulation of product beneath the overhanging edge of the safety ring bolted to the top of the cylinder. Pistons consisting of two (upper and lower) pieces should likewise be given attention at the time of their removal from the cylinder for determining whether any product or material has found its way into their interior.

When compressed air is used to operate a stuffer, an effective filter should be installed in the air intake so that only filtered air enters the compressor. The compressed air storage tank should be equipped with a drain so that accumulated oil and moisture can be frequently drained away. Water and oil traps should be installed in the air lines between the compressed air storage tank and the stuffer. It is desirable that the spent air be exhausted outside the building so that fine particles of oil and moisture do not permeate the air in the sausage-stuffing de-

partment.

8.26 Expellers used in rendering of edible products must be cleaned thoroughly following use. All parts of this equipment should be accessible for cleaning and inspection. To accomplish this, it has been found necessary to require removal of the plates forming the barrel around the press worm. Also, demounting or providing clean-out and inspection openings in the feeding mechanism has been found necessary.

PART 9—ANTE MORTEM INSPECTION

9.1 It is expected that the management of the official establishment will make such provisions as are necessary to enable the inspector to perform an efficient ante mortem inspection of all animals on the day of slaughter.

This includes furnishing competent help, adequate light, conveniences for inspection (properly arranged chutes and pens for segregating suspects and condemned animals), and thermometers for taking temperatures. Prompt action should be taken to make correction when any of these facilities are lacking.

9.2 Insofar as it is practical, animals should be in-

spected both while at rest and while in motion.

9.3 A reactor to the tuberculin test that has died otherwise than by slaughter or which is condemned on ante mortem inspection should be given, if possible, a post mortem examination in the inedible products department. The findings of the post mortem examination shall be reported to the Animal Disease Eradication Branch field office and to the State livestock sanitary official of the State where the animals were tested.

9.4 The identification of tuberculin reactors should be accomplished with due care, which includes making a record of the reactor numbers directly from the metal tags.

9.5 When tags are missing from animals otherwise identified as reactors, accurate descriptions should be entered on all necessary reporting forms, including the estimated or known weight, presence or absence of brand marks on the jaw or otherwise, the presence or absence of horns, the breed, the color and markings, and the sex. This information will be useful to those responsible for

tuberculosis testing.

9.6 Inspectors should caution against persistent or extreme carelessness in the handling of animals, which will result in injuries causing damage to their flesh. If after calling attention to unnecessary cruelty, the proper effort is not made to correct the faulty practices, inspectors in charge should report the matter to the local authorities having jurisdiction and also inform the Washington office of the action taken. It is not expected that the inspector will personally stop practices which are alleged to constitute cruelty to animals. Having given the proper information to local officials charged with the enforcement of local statutes, he should take no action to preempt or to restrict the authority of such officials.

9.7 It is not expected that officially tagged and branded brucellosis reactors will be treated or handled as ante mortem suspects except when they show evidence of any disease or condition which under the meat inspection reg-

ulations requires the animal to be treated as a suspect. If ante mortem findings indicate that a brucellosis reactor should be condemned according to the meat inspection regulations, such action should be taken and the proper information, including the disposition of the animal, forwarded to the proper bureau and State livestock sanitary officials. The identity of brucellosis reactors is required to be maintained throughout inspection in order to assure proper identification by the post mortem inspector and to permit proper recording of the slaughter and disposition of such animals.

- 9.8 By cooperative arrangement with the Animal Inspection and Quarantine Branch, inspectors of that branch will make ante mortem inspections in accordance with the Meat Inspection Regulations of all hyperimmune swine going to an official establishment for post mortem inspection. They will make the customary ante mortem report and deliver these reports to the designated meat inspectors.
- 9.9 The provisions for emergency slaughter are not intended to cover the slaughter of sick or dying animals.
- 9.10 Ante mortem inspection of horses should include observing the animals closely at rest and in motion for action and appearance. Fistulous withers, poll evil, melanotic tumors, respiratory disturbances and cripples of various kinds are the most frequently observed abnormal conditions. Animals showing conditions which would cause condemnation on post mortem inspection and those having a rectal temperature of 105° F. or above should be condemned on ante mortem inspection. A walkway, about 36 inches above the floor and along the inside of the pen, has been found to lessen the hazard of injury to the inspector and better enable him to observe the neck and withers regions of the horses when performing ante mortem inspection.
- 9.11 Listerellosis or listeriosis has been reported from all sections of the country in cattle, sheep, swine and horses. The symptoms on ante mortem inspection are typical of encephalitis and may consist of weakness, fever, incoordination, circling, pushing or leaning against objects. The head may be held to one side and the ear on that side drooped; if moved, the head returns to this position. Pharyngeal paralysis is frequently observed. Anistical control of the country in cattle, sheep, swine and horses. The symptoms on ante mortem inspection are typical of encephalitis and may consist of weakness, fever, incoordination, circling, pushing or leaning against objects. The head may be held to one side and the ear on that side drooped; if moved, the head returns to this position. Pharyngeal paralysis is frequently observed. Anis

mals showing symptoms of this disease should not be slaughtered.

- 9.12 Scrapie is a disease of sheep and goats which has been found in this country. During the early stages of the disease, no characteristic symptoms develop; however, later the animals become restless and excitable with tremors and grinding of the teeth. Pruritis is characteristic and the animal rubs against solid objects and scratches with the hind feet. Soon after this, the wool drops from the flank and hind quarters. Gradual incoordination follows and excitement may bring on convulsions and coma. This stage is followed by emaciation and weakness with the animal unable to rise; death soon follows. When animals suspected of having this condition are found, a report should immediately be made to State and Federal officials in charge of animal disease control work who will dispose of the animals affected with scrapie.
- The importance of the detection of vesicular conditions in hogs on ante mortem inspection cannot be overemphasized. It is only when a vesicular condition is identified and reported in the live animal that a differential diagnosis of the vesicular condition can be readily made. Inspectors performing ante mortem inspection on hogs should take whatever steps are necessary to assure that no animals affected with a vesicular condition escape detection. Since lameness of the animals is one of the most prominent symptoms, there should be little difficulty in identifying such animals by having the lots of animals moved or presented for inspection in such a manner that any lameness would be observed. Inspectors should take plenty of time to observe lots of hogs on ante mortem inspection and require necessary facilities such as adequate lighting and pen conditions for the thorough type of examination which is expected.

In addition to lameness, characteristic vesicles may be observed on the feet around the coronary bands, interdigital spaces and the foot pads near the dew claws. The entire foot pad may eventually slough off, the posterior edge coming loose first. Vesicles may also be seen on the snout, lips, oral mucosa and tongue with considerable variance in size. There is an early rise in temperature which persists until the vesicles have ruptured when it rapidly returns to normal. Secondary infection may appear at the location of the vesicles and other infection such as pneu-

monia and enteritis may follow. All instructions for ante mortem and post mortem dispositions of animals affected with this condition will be found in Sections 9.18 and 11.34, respectively, of the Meat Inspection Regulations.

When hogs are present in excess of the number which will be slaughtered on the day of ante mortem inspection, careful daily inspection of all slaughtered animals in the pens owned or leased by the establishment should be made. Such examination will be helpful in enabling the inspector to know the general condition of hogs which will later be subjected to thorough ante mortem inspection on the day of slaughter. When any vesicular condition is observed, the matter should immediately be reported by telephone to Federal and State officials in charge of animal disease control who will make a diagnosis, and instruct you and the plant management concerning procedures that must be followed.

PART 10—POST MORTEM INSPECTION

10.1 Inspectors assigned to post mortem duties are expected to observe the condition of rooms and equipment and the clothing of establishment employees to see that they are clean and that the equipment, including sterilizers, wash basins, and facilities for inspection are in proper working order. For example, the sterilizers should be heated ready for use, hot and cold water should be available in ample quantities at wash basins and other outlets where needed, and liquid soap and sanitary towels should be provided at each wash basin. It is expected that these rules will be observed before operations are begun.

10.2 Each inspector performing post mortem duties should constantly observe the maintenance and use of sterilizers and wash basins during the day and require

that they be properly maintained and used.

10.3 Certain areas have been provided and set apart for the exclusive use of inspectors, as, for instance, the area provided for head inspection of hogs. Establishment employees must not be permitted to encroach upon such

places to the detriment of inspection work.

10.4 The "U. S. Retained" tags furnished for marking carcasses and parts are considered adequate to meet all requirements. If the need for additional types of tags becomes apparent, the matter should be brought to the attention of the Washington office with full information

and recommendations rather than to begin the use of plain tags or other supplemental material.

10.5 The method of tagging carcasses to indicate various conditions found on initial inspection may be varied, as directed by the inspector in charge, according to local conditions. One such method that has been used with success at several stations is as follows:

Pin-point glands: Tag low on left foreshank. Slight tuberculosis: Tag in left axillary space.

Well-marked or extensive tuberculosis: Tag on left

belly.

Slight cervical abscess: Tag low on right foreshank. Well-marked or extensive cervical abscess: Tag in right axillary space.

Cholera, septicemia, etc.: Tag on right belly.

Any condition for which the carcass should not be opened, at least until it reaches the final room: Tag on median line.

For ready identification, the tags printed in black are sometimes used at the head inspection station, and tags printed in red are used at the viscera inspection station.

- 10.6 The brands "U. S. Condemned" and "U. S. Passed for Cooking" are to be used for marking carcasses and parts. Informal marks and tags should not be substituted for these brands.
- 10.7 Inspectors are expected and required to make such incisions or inspections as are essential to determine the presence, character, and extent of any condition which might have a bearing upon the disposition of the carcass or any of its parts. However, unnecessary mutilation of carcasses or parts which may ultimately be passed for food and, of course, the unjustified condemnation of carcasses or parts, must be avoided.

10.8 When making inspections of glands or organs requiring the use of a knife, it is essential that the tissues be sliced in such a way that the exposed surfaces may be carefully examined. Hashing glands by a hacking or chopping method which affords no opportunity to examine the

cut surfaces is not acceptable.

10.9 The "final" inspector is the immediate supervisor of the slaughtering and related departments to which he is assigned. As such, he is responsible for all matters pertaining to the inspection. This applies not only to the actual final inspection of retained carcasses but also to the

sanitary condition of the premises, the condition and operation of equipment, and the work of Branch employees who may be under his supervision. Matters involving structural changes or improvements are generally taken up with the inspector in charge or his designated assistant.

10.10 Post mortem inspection of "U. S. Suspects" should not be performed until the ante mortem findings have been received by the post mortem inspector.

10.11 The routine (other than final inspection) post mortem inspection of every carcass shall include a general examination of the entire carcass (outer surfaces and exposed surfaces of cavities) and of the viscera, in accordance with the following. The inspector in charge is authorized to include any additional examination provided he notifies the Washington office of his action.

(a) Cattle

- (1) The methods employed in knocking, shackling, and bleeding the animals should be observed. The animals should be handled promptly. The area where the stunned animals are discharged from the knocking box should be kept clean and as dry as possible.
 - (i) There have been a number of inquiries relative to the use of captive-bolt pistols in official establishments. The success with which these pistols are used depends upon the care exercised by the establishment employee when stunning cattle. The experience to date has been that hair, pieces of skin, and bone are carried into the brain. This method of stunning animals has sometimes been used at the base of the skull to sever the spinal cord. This usually caused extensive hemorrhage in the area and required considerable trimming of the neck after the carcass had been split. There is no objection to the use of this method of stunning cattle in official establishments provided proper disposition is made of hemorrhagic tissue and of the brains that are contaminated with foreign material.
 - (ii) When a rifle or other firearm is used for stunning or killing animals pieces of the bullet can usually be found scattered within the brain. It is also likely that some hair, skin, and bone is carried into the brain by the bullet. Care should be taken to see that brains

contaminated with lead particles or other foreign matter are not passed for food.

- (2) The heads and corresponding carcasses are identified by duplicate numbered tags applied by an establishment employee before the heads are removed. The heads should be removed in a manner to avoid soiling them with paunch contents and, of course, the skinned heads should not be permitted to come in contact with the floor. The horns and all pieces of hide should be removed with equipment that is sterilized after its use on each head. This must be done before the heads are washed. The washing of the head should be done in especially constructed compartments or areas which will control the splash of waste water. The washing, done by an employee of the establishment, should thoroughly cleanse all outer surfaces and thoroughly flush the mouth, pharynx, and nasal passages of each head.
- (3) After the head has been placed on proper equipment (standard removable metal head loops or removable hooks which hold the heads by insertion into the foramen magnum), the inspector should carefully observe all surfaces of the head to detect abnormalities and should expose, incise, and examine the mandibular, atlantal (if present), suprapharyngeal, and parotid lymph glands (two each).

(4) Following inspection of the lymph glands, an establishment employee should detach the base of the tongue from the head so that the tongue hangs only by its anterior attachment at the symphysis of the mandible, thus

giving easy access to the muscles of mastication.

(5) After the tongue has been "dropped," the inspector should incise and inspect the muscles of mastication as indicated in section 11.24 of the regulations. (If preferred, the inspection of the parotid lymph gland may be made at this time rather than as indicated above.) The inspector should also make a thorough visual and digital examination of the tongue. Ulcers, scar tissue, and the tonsils shall be removed by an employee of the establishment under the direction of the inspector. Lesions resembling actinobacillosis or actinomycosis should be carefully examined by the inspector and incisions made, if necessary, to determine the character and extent of the lesions.

(6) Inspection of the head should be completed before

evisceration of the corresponding carcass.

- (7) After the head has been removed from the carcass and while the head is being cleaned and inspected, establishment employees place the carcass on the skinning bed (except in the case of a few installations where this procedure is not used). Care must be taken to see that the area is acceptably clean before the carcass is lowered. The head skin must be so manipulated that the tissues of the neck will be protected from soilage, and other precautions must be taken to prevent contamination of any of the meat of the carcass. The front and hind feet are then removed, and the sides and belly of the carcass are skinned. In removing the front feet, care should be taken to expose as little as possible of the tissues of the foreshank and leave a "tie" of the hide completely covering the shank as far down as possible toward the carpal articulation where the cut is made to remove the foot. Lactating udders are removed at this point in such a manner as to prevent soilage of the carcass with udder contents. The supramammary lymph gland should be left attached to the carcass until inspection is completed.
- (8) The esophagus should be effectively closed by some acceptable method to prevent the escape of paunch contents when the carcass is raised.
- (9) When the carcass is moved from the skinning bed, establishment employees must use care to see that the exposed parts of the carcass are protected from contact with the floor or with fixed objects. The floor of this area should be cleaned with a squeegee or broom after each carcass is handled. Before or at the time of evisceration, ties should be made at the neck of the bladder, at the rectum, at the point where the small intestine leaves the stomach, and at the point where the esophagus attaches to the paunch. At each of these two last named points, two ties should be made about four inches apart, with the contents being stripped from the intervening portion of the intestine or esophagus, respectively, before the second tie is made so that the tissues can be severed with a knife between the ties without any spillage of the contents. Procedures at variance with the above may be accepted if the purpose of the requirements is fully accomplished.

(10) All parts of the viscera should be inspected when removed from the carcass. To facilitate the examination, repeated incisions should be made of the right and left bronchial lymph glands, the medial and posterior mediastinal lymph glands, and the portal lymph glands. The heart should be opened and examined as directed in section 11.24 of the Regulations. Examination of the liver should include opening the large bile duct. This should be done very carefully as cutting through the duct into the liver tissue will interfere with the detection of the small lancet liver fluke. The incision should extend at least an inch through the bile duct dorsally and in the other direction as far as possible. The lungs and liver should be palpated for the purpose of detecting any abnormal condition, whether located superficially or deeply in the organ. The mesenteric lymph glands, the paunch, and the spleen should be examined and incised if necessary. The junction of the rumen (paunch) with the reticulum (honeycomb) should be carefully palpated to determine whether there are abscesses present at this point.

- (11) Rail inspection of dressed carcasses, in addition to observation of all surfaces of the carcass, shall include palpation (and incision if necessary) of the prescapular, precrural, superficial inguinal (supramammary), internal iliac, lumbar and renal lymph glands, the region of the kidney, and the pillars and flat portion of the diaphragm.
- (12) When lesions of actinomycosis are found in the head but not in the viscera, the incision of the body lymph glands may be omitted. However, a careful survey of the carcass should be made, including palpation of the region of the body lymph glands for the detection of possible abnormal conditions. The body lymph glands shall be incised and examined when lesions of actinomycosis are found in the viscera.
- (13) The post mortem examination of cattle which have reacted to the tuberculin test should receive special attention in order to locate all the lesions. This post mortem inspection of cattle which are properly designated as reactors to the tuberculin test should include an examination of all body lymph glands. Further, if no lesion is found in the viscera or the body lymph glands, the inspection should be continued so as to include a survey of the hide, the slicing of the mammary organ, and the slitting of the trachea for the detection of lesions which experience has shown may exist at some one of these points without other lesions. In addition to the "U. S. Retained" tag number, the identification of the animal should be indicated by the reactor tag number.

(14) The examination by incision of the popliteal lymph glands and the axillary lymph glands may be omitted in all carcasses of reactor cattle in which no tuberculosis is found elsewhere.

(15) In the examination of all cattle carcasses in which any tuberculosis lesion is found, the popliteal lymph

glands shall be exposed and incised, if—

(i) A lesion is found in the region of the hindquarters

or the skin thereof.

(ii) A lesion found in the popliteal lymph gland in addition to the lesions found elsewhere would change the disposition of the carcass.

(16) In the examination of all cattle carcasses in which a tuberculous lesion is found, the axillary lymph glands

shall be exposed and incised, if-

(i) A lesion is found in the region of the forequarters

or the skin thereof.

(ii) A lesion found in the axillary lymph gland in addition to the lesions found elsewhere would change the

disposition of the carcass.

(17) The fact that an animal has reacted to the test for brucellosis is not regarded as sufficient cause to require special post mortem technique. Accordingly, the carcass, parts, and viscera of a reactor not classed as a suspect need not be marked by affixing a "retained" tag unless cause other than the reaction to the brucellosis test requires such action.

(18) Washing of carcasses should be deferred until

inspection has been completed.

(b) Hogs

(1) Inspectors assigned to head inspection are required to inspect the hog carcasses to determine whether they have been properly cleaned. The establishment has the responsibility for properly cleaning hog carcasses before any opening is made for evisceration or dropping the head. Inspectors can assist the managements of establishments in assuming this responsibility by pointing out many of the factors which influence satisfactory scalding, dehairing and cleaning. Some of these factors are circulation, water temperature, number of carcasses and time carcasses remain in the scalding tub; condition and operation of the dehairing machine including the water temperature and number of carcasses through the ma-

chine. These factors may vary considerably in different installations and with the type of hogs slaughtered; however, when given adequate attention, there should be no difficulty in obtaining satisfactorily cleaned carcasses. The knife used to partly sever the head should be sterilized after each head is dropped. The carcass should be presented to the head inspector in such a way as to make the cervical lymph glands readily available for inspection.

(2) It is required that both mandibular lymph glands be carefully sliced and the cut surfaces examined. Other lymph glands should be incised for examination when necessary. Exposed muscle tissue should be observed for evidence of cysticercosis or for other abnormalities which might warrant retention of the carcass.

(3) Whenever necessary to prevent contamination of the carcass or viscera, the rectum shall be tied before evisceration. Establishment employees should exercise

care to prevent cutting of intestines and stomach.

(4) Viscera inspection shall include the palpation of the mesenteric, portal, bronchial, and mediastinal lymph glands. The liver, spleen, lungs, and heart shall also be palpated and all parts of the viscera carefully observed. Whenever necessary and at all times when the carcass has been retained for tuberculosis, "pin-point glands," or cervical abscesses, the splenic, portal, bronchial and mediastinal lymph glands, and the spleen shall be incised for inspection.

(5) The viscera inspector should observe the carcasses and, insofar as possible, the methods used by establish-

ment employees in handling carcasses and parts.

(6) The rail inspector is required to observe carefully all parts of the carcass. He should require that bruises, wounds, and other abnormalities be removed by an establishment employee. Care should be taken to detect parasitic infestations, particularly kidney worms (Stephanurus dentatus). The cut surfaces of hams, briskets, and diaphragms should be observed for evidence of cysticercosis. Establishment employees are required to remove the remnants of spermatic cords, abscesses, and bruises which may be present in ham facings.

(7) An establishment employee should be required to remove all lymph glandular tissue from the necks of carcasses retained on account of cervical tuberculosis or cervical abscesses and in case the heads are passed for

food or for cooking, a careful removal of the mandibular and adjacent glands should also be required.

(8) In most instances the character and extent of tuberculous lesions can be determined without incision. When they have been detected by palpation and visual examination in swine mesenteric lymph glands, the incision of such glands as a part of the final inspection shall not be required unless the final inspector considers it necessary.

(9) Inspectors performing the final inspection of hogs retained on account of tuberculosis shall examine by incision all important body lymph glands of such carcasses

except as provided below:

(i) Incision of the body lymph glands may be omitted provided careful inspection of the head and viscera shows no lesion other than those in the lymph glands of the head and mesenteries.

(ii) Incision of the prescapular gland may be omitted provided careful inspection shows the prepectoral gland

and the thoracic pleura to be free of lesions.

(iii) Incision of the precrural gland may be omitted provided an examination of the superficial inguinal, sublumbar, and iliac glands shows them to be free of lesions.

(10) Establishment employees are required to sterilize

implements after their use on retained carcasses.

(11) The necks of hog carcasses may be washed after removal of the leaf and scrap fat. The skimmings from the tank receiving the water from neck washing shall not be used for edible purposes.

(c) Calves

(1) The cleaning and dressing of calf carcasses shall be done while such carcasses are suspended from an overhead rail.

(2) The heads shall be thoroughly washed and the cavities flushed in the same manner as cattle heads. Incisions for gland inspections may be confined to the suprapharyngeal lymph gland unless there is reason to believe that incisions should be made of the other glands of the heads.

(3) The viscera including the paunch and intestines shall be presented for inspection. Unless directed otherwise by the inspector in charge, the viscera inspection should be by palpation of the heart, lungs, liver and attached lymph glands, kidneys and illiac glands, with any

necessary incisions and a careful observation of remaining parts of the viscera.

(4) All exposed surfaces of the eviscerated calf carcass shall be inspected. The skins of bruised calves and those affected with grubs as well as those found unclean, shall be removed as part of the dressing operations at the time

of slaughter.

(5) The adequacy of dressing and cooler facilities to accomplish sanitary handling of the carcass' viscera and parts, rather than the age of the animal as determined by the teeth or the weight, are the factors which should be considered when an establishment proposes to dress so-called large calves. The inspector in charge should determine what inspection steps are necessary on such carcasses to assure that any disease or parasitic conditions are detected.

(d) Sheep

(1) In order to prevent contamination of sheep heads, scalping operations should be delayed until the pelt has been loosened from the rest of the carcass. Horns should be removed at the time of scalping. Over-all washing

should be accomplished before openings are made.

(2) Viscera inspection: The abdominal and thoracic viscera should be observed carefully, and the lungs and liver with related lymph glands and the heart should be examined by palpation. The main bile duct should be opened and examined for parasites. Incision of the bile duct should be made by the eviscerator as part of the

dressing operations.

- (3) Rail inspection: All parts of the carcass should be observed carefully and an examination made by palpation of the area above the popliteal lymph gland, and the precrural, superficial inguinal (or supramammary), and prescapular lymph glands. In palpating these glands, with the exception of the popliteal, it is necessary to place each gland in turn between the thumb and fingers, including as little as possible of the overlying fat and tissue. The inner surfaces of the pelvic, abdominal, and thoracic cavities should be observed.
- (4) It has become apparent that in addition to careful observance of established post mortem procedures applicable to all species, new methods or improved methods are essential to detect all cases of caseous lymphadenitis in

sheep carcasses, particularly in those of adult sheep and

especially in the body lymph glands.

Inspectors may by practice acquire a high degree of efficiency in detecting lesions of this disease in most of the principal body lymph glands by palpation alone, and immediate and careful attention should be given by inspectors in charge and supervisors to developing such efficiency and skill in inspectors assigned to post mortem inspection of sheep.

Although the exposure and incision of the body glands is not considered necessary or desirable as a general practice, such procedure should be followed when efficient palpation fails to establish beyond a reasonable doubt that

the glands are free from lesions.

When incision of body glands is necessary, care should be exercised to leave the glands in situ and held by natural

attachments.

Should additional facilities or modifications of existing facilities be necessary for effective inspection of sheep carcasses, inspectors in charge should request that such improvements be furnished promptly and any other necessary measures taken to perfect the inspection for caseous

lymphadenitis.

To make certain of the efficiency of inspection of body glands of sheep carcasses, the inspector in charge or supervisor must put into effect some form of systematic reinspection. At a few establishments where sheep are slaughtered at high speed, it may be necessary to station an inspector regularly at the carcass-dressing rail, beyond the initial inspector's station, for the purpose of obtaining a second palpation of body lymph glands. The check inspector should, if possible, be stationed at a point remote from the initial inspector's station in order that his attention will not be diverted by the initial inspection. At smaller establishments it will not be necessary to have a check inspector regularly assigned, but the inspector in charge should work out a systematic check inspection according to the needs of the particular slaughtering layout. In many instances, the initial inspector has time for a recheck of the body lymph glands by palpation or incision as may be necessary.

(5) The final inspector will, of course, make a thorough examination of retained carcasses and viscera. When caseous lymphadenitis is found, the final examination

should include incision of the precrural, superficial inguinal (or supramammary), internal iliac, sublumbar, renal, prepectoral, prescapular and popliteal lymph glands, and of the kidneys and other glands if the conditions so indicate.

(6) A common condition found seasonally in sheep is sometimes referred to as "wild oats" or "needle grass." This plant material has been identified as a species of stipa, probably stipa comata, (needle body-type inflammation) around the plant particles which are imbedded in the tissues. When only a few carcasses are affected or the carcasses have only a few lesions of the condition, the foreign material should be removed as a part of the dressing operations in order to avoid extra inspection supervision. When larger lots of affected carcasses or ones extensively affected with the condition are encountered, it is permissible to place the carcasses in the cooler for chilling prior to removal of the foreign material. Such carcasses must be segregated and may be held under circumstances which would preclude any possibility of their being released before the foreign material has been removed.

(e) Horses

- (1) Loose hair can be controlled by spraying the bellies, legs, and feet with water prior to slaughter. Adequate measures should be taken to prevent the contamination of carcasses and viscera with urine. Hide removal should be accomplished without the carcass contacting the floor or other fixed objects. The evisceration and splitting operation should be performed in such a manner that the carcass does not contact the floor.
- (2) Cervical inspection: The head, identified with the carcass by duplicate numbered tags, should be removed immediately after skinning. All hide and external ear canals should be excised prior to thorough washing and flushing of the nasal and oral cavities. Following this, the head should be placed on the inspection rack. The inspection should include a general visual examination of the head for cleanliness, palpation of the submaxillary and pharyngeal lymph glands and gutteral pouch with incision of the parts when necessary to determine the nature and extent of any abnormality. The nasal septum and turbinate bones should be exposed and given careful examination. This can be accomplished by using one of the

following methods or another method found to be satisfactory: (1) Split the head lengthwise and cut the septum from its attachments or (2) cut through the nasal bones transversely with a cleaver at a point in line with the anterior end of the facial crest and pull the nasal bones downward. The purpose of this inspection is primarily to detect glanders but polypi, rhinitis and sinusitis are also revealed. Horse tongues should be examined for tooth lacerations which must be excised. The dark stain frequently seen on the dorsal surface of horse tongues should be removed by excision. The muscles of mastication need not be incised for examination.

- (3) Viscera inspection: Viscera should be placed in the usual type inspection truck for examination. Palpate the bronchial and mediastinal lymph glands and lungs and incise when abnormal conditions are found. The heart should be incised as for cattle and examined for endocarditis and melanosis. Palpate the portal lymph gland, liver and spleen. Examine the liver carefully on both surfaces. Open the bile duct as for cattle in an examination for flukes. The rest of the viscera and body cavities should be carefully observed for any abnormality. When horse lungs are prepared as edible product, the usual inspection for foreign material in the bronchi should be given.
- (4) Rail inspection: Palpate the body lymph glands and observe the carcass for abnormality. Encysted parasites may be found under the peritoneum on the inner abdominal walls. The spinous processes of the thoracic vertebrae in the withers region should be removed and this area as well as the poll carefully examined for fistula. Removal of the first two cervical vertebrae facilitates inspection of the poll area. Equipment used in splitting or cutting the withers and poll regions should be sterilized after each use. The examination for melanosis should be conducted carefully, giving particular attention to the axillary and subscapular space in white or grey horses or when melanosis is found elsewhere. Obviously, this requires that such areas be exposed to view by removing the overlying tissues (dropping the shoulder). The fat and tissues lining the pelvic cavity should be given careful attention, especially along the femoral artery in white and grey horses.

10.12 Attention is directed to the lacerated and soiled condition of many hog tongues during and following the dressing operations. The mutilation is caused in large

measure by the action of the beaters of the dehairing machine. When this condition exists, all lacerations and punctures in the tongues must be removed by excision. Effective measures should be adopted to prevent the mutilation of the tongues. Attention should also be given to the soiled condition of the sound mucous membranes, which, even after washing, not infrequently show distinct evidences of staining from the scalding water or escaped contents of the stomach. When this condition is present, whether the tongues are or are not lacerated, the removal of the mucous membranes by scalding will be required. When this trimming of tongues and removal of mucous membranes are required, such procedures should be regarded as a part of the dressing operations.

A survey indicates that threadworms are found in tongues of hogs coming from most sections of the country. Unless it is demonstrated by careful inspection that hog tongues are free from threadworm infestation, all hog tongues shall be subjected to scalding or other treatment which will remove the mucosa where the worms are imbedded. Such removal of the mucosa shall be regarded as part of the dressing operation whether the tongues are to be shipped from the establishment or used within the establishment in the manufacture of meat food products. Threadworms may be found among the papillae at the base of the tongue or imbedded in characteristic zig-zag formations in the smooth mucosa on either side of the base of the tongue. Several types of exploring devices when used by properly trained employees work very well in locating threadworms. Abundant light must be provided in the inspection area.

10.13 A clean aqueous solution of common salt not exceeding 20° salometer strength may be used at official establishments for wetting cloths prior to their application to dressed carcasses of any species, under the following conditions:

(a) The cloths shall not exceed in weight or thickness that of the heavy grade of muslin commonly used for clothing cattle carcasses. Aside from the unavoidable overlapping at certain points, the cloths may be applied in only a single layer.

(b) Rolls of cloth such as may be applied in the furrow of the neck and in the renal and iliac regions of cattle carcasses shall not be wetted in salt solution.

(c) Salt solution may be applied to carcasses only once and only in the manner hereinbefore specified unless the carcasses are to be salt cured in their entirety in the establishment where slaughtered, in which case such measures shall be adopted as will maintain the identity of carcasses so treated without material additional supervision. If carcasses enveloped in cloths are placed in bags or other coverings for shipment, such outer coverings shall bear prominent and legible marks of inspection.

(d) Carcasses shall be branded in the manner prescribed by the Branch, and such methods shall be adopted as will avoid impairment of the legibility of brands by the application of the wet cloths. When carcasses are forwarded from official establishments without removal of the cloths, additional brands, if necessary, shall be applied to the carcasses at such locations as will be clearly visible at all times without re-

moval of the cloths.

(e) Carcasses shall not be clothed in such a manner that their weight is increased through absorption of water.

10.14 Inspectors should give special attention to assure that contamination of carcasses and parts does not occur when fountain-type brushes are used for washing. The use of this type of equipment has been found to frequently result in the transfer of objectionable material from one carcass to another.

PART 11—DISPOSAL OF DISEASED CARCASSES AND PARTS

11.1 Certain post mortem inspectors have adopted different standards in disposing of hog carcasses affected with what they believe to be avian tuberculosis and those they believe to be affected with the bovine type. The Branch does not approve this practice and has not authorized such deviation from the published regulation governing disposition of carcasses affected with tuberculosis.

11.2 A general guide in respect to the terms "slight," "well marked," and "extensive" as they apply to tubercu-

losis glands is as follows:

Slight.—The gland is not enlarged and there is more

healthy than diseased tissue.

Well marked.—There is more diseased than healthy tissue with or without some gland enlargement.

Extensive.—Glands are greatly enlarged or nearly all the tissue is involved.

11.3 The form used for making the final post mortem disposition of retained carcasses and parts report has been revised to include an unlisted tags section for all species. Suspects and condemned carcasses should be reported on the upper part of the form, giving a brief, concise description of the conditions found on post mortem examination. Other disease, parasitic and abnormal conditions may be tallied in the lower portion of the form.

UNLISTED TAGS

Tuberculosis—cervical glands only
Tuberculosis—mesenteric glands only
Tuberculosis—cervical and mesenteric glands only
Cervical abscess—heads passed
Cervical abscess—heads condemned
Pin-point glands

11.4 For the purpose of uniformity in reporting, inspectors should observe the following: When the head of a hog showing slight tuberculosis lesions is passed for cooking and the carcass passed without restriction, the head is counted as a separate part and should be so reported. When the entire carcass is passed for cooking, the head and body should be reported as one carcass. When a carcass is passed without restriction or for cooking and the head is condemned, the head should be counted as a separate part and reported as such.

11.5 A small well-encapsulated abscess in a lymph gland of a hog head will not necessitate condemnation of the entire head. It may be reported as a cervical abscess and the head passed for food after complete removal and condemnation of the diseased gland. If only the head is affected, the lesion will be reported in the unlisted tags and the carcass appropriately identified on the post

mortem report.

11.6 Cattle which have reacted to the tuberculin test and in which no tuberculous lesion is found on post mortem examination should be described by the phrase: "No visible lesion found."

11.7 When a lesion of tuberculosis or one resembling that disease is found by a veterinarian, in the post mortem examination of a nonreactor, bovine animal, specimens of the lesion should be sent to the pathological laboratory

serving the area. Half of the specimens should be packed in borax in the usual manner and half packed in 10 percent formalin solution. The case number as shown on Form ADE 6-35 should be shown in the upper right hand corner adjacent to the establishment number on the specimen record for inspectors, Form MI 403-8, which accompanies the specimens to the laboratory. Specimens of skin lesions should not be forwarded for examination. Specimens of the lesions packed in 10 percent formalin solution should be forwarded to the Biological Control Section, Meat Inspection Branch, ARS, Animal Husbandry Building, Agricultural Research Center, Beltsville, Maryland.

11.8 Brucellosis reactors should be reported on a separate Form M. I. 403-6. This form should not be used for reporting any animal not classed as a reactor to the brucellosis test. On the report the reactor should be identified by the number of the official reactor tag affixed in the field, or if it is not present, then other identifying ear-tag numbers should be listed. In cases where no tags remain, it is well to record any identifying features or characteristics of the animal. If a "retained" tag is also used, the number should follow below the reactor or other ear-tag number. Each reactor should be recorded separately on the report under the heading "Brucellosis Reactor." This term is regarded as sufficiently informative for all reporting purposes unless the carcass is retained. In the latter case the term "Brucellosis Reactor" should be followed by the diagnosis or cause for retention and a description of the lesions or conditions placed opposite the "retained" tag number.

The names of owners should not be given on the Form M. I. 403–6. A carbon copy of the report shall be sent to the veterinarian in charge of the Animal Disease Eradication Branch in the state in which the reactor originated. A copy of the 403–6 report may be sent to the State livestock sanitary official.

Brucellosis reactors marked as suspects and those retained on post mortem inspection for causes other than being a reactor should be recorded also on the summary of ante mortem and post mortem inspection report in the regular way for the disease or condition causing the retention, but without a notation that the carcass was that of a brucellosis reactor. Otherwise, no entries regarding

brucellosis reactors are necessary in making up the summary of ante mortem and post mortem inspection report.

- 11.9 Testicles from bulls which have reacted to the brucellosis test shall not be passed for food purposes.
- 11.10 There is convincing evidence that the so-called lymphatic leukemias, pseudoleukemias, and lymphosarcomas are related variants of one disease, which is a malignant neoplasm of lymphatic tissue. The term "malignant lymphoma" has been widely used in the veterinary profession to describe this disease. Accordingly, when veterinarians encounter this condition in the conduct of their post mortem work, it should be reported as "malignant lymphoma."

11.11 Deposits of melanin are normally found in the surface tissue of the tongue, brain, lips, and palate of

certain animals.

When not associated with characteristic malignant tumor formation, deposits of melanin located in the muscle, connective tissue, periosteum, and fat shall be radically removed and the unaffected portion of the carcass, organ, or part of the carcass may be passed for food after re-

moval and condemnation of the affected portions.

If the character and location of the melanin deposits are such that complete extirpation is difficult and uncertainly accomplished or if the deposits render the organ or parts unfit for food, the affected organs or parts shall be condemned. When melanin deposits are found to be distributed in the carcass or part in such manner that removal is impractical, the carcass or part shall be condemned.

The slight melanin deposits occasionally found in the spinal meninges are not considered significant unless they are also present in the sheaths of the spinal nerves and extend into the meat. If such is the case, it may be necessary to bone the affected part or parts to remove the deposits of melanin.

In hogs, uniform melanin deposits over the skin or in circumscribed areas in the skin need not be removed unless the character is such that melanin deposits are tu-

morous or smeary.

When melanin deposits are associated with characteristic malignant tumor formation, disposition shall be made in accordance with sections 11.12 and 11.14 of the meat inspection regulations, as amended.

- 11.12 The disposition of bled carcasses which have been left unopened an unusually long time due to a breakdown, careless handling, or other exigency is affected by many factors, such as the size of the carcass, external temperature, kind and amount of contents of stomach and intestines, and the period of delay in evisceration. It is therefore impossible definitely to fix time limits which will determine the disposition of the carcass. The distinction between local or superficial absorption of intestinal gases and the changes produced by actual or incipient putrefaction in the tissues must be taken into account. It may be possible to remove the first, but not the second. Therefore it is imperative that disposition be based upon post mortem findings rather than on the length of time the carcass is left unopened. In many cases, it is desirable to delay final disposition until the retained carcasses have been thoroughly chilled and inspection made part by part. The above does not void the time limit required in section 10.16 of the regulations pertaining to hyperimmune swine.
- 11.13 The completion of the reverse side of Form M. I. 402-2, Identification Tag—Ante Mortem, to show the disposition of the suspect on post mortem examination may be a duplication of work since these findings must be recorded on Form M. I. 403-6. Report of Final Post Mortem Inspection of Retained Carcasses. Form M. I. 402-2 is a station record used primarily to convey information from the ante mortem inspector to the final post mortem inspector, and the use of the reverse side of the form to record post mortem disposition is not required. However, it may still be used for this or other purposes if the inspector in charge thinks it is necessary. Inspectors must never permit the collection or handling of unborn calves except in areas that are under immediate supervision or positive control that will absolutely prevent the removal of material from the area without its being destroyed for food purposes.
- 11.14 All specimens of diseased tissues should be sent for examination to the Biological Control Section, Meat Inspection Branch, ARS, Animal Husbandry Building, Agricultural Research Center, Beltsville, Maryland. Inspectors should be encouraged to use the laboratory to obtain information necessary for making proper dispositions. Naturally, the ante mortem and post mortem

findings must be considered along with the report of histological examinations. Materials for packing and forwarding specimens such as 10 percent formalin solution, microscope slides for blood smears, bottles, mailing tubes, and franks should be readily available to all veterinarians who have need of these supplies. No specimens other than those packed in 10 percent formalin solution should be forwarded for examination.

11.15 Animals which are known to have recovered from listerellosis may be slaughtered as suspects. If found free from disease conditions which would require other disposition, the carcass and viscera may be passed for

food but the head should be condemned.

11.16 In preparing Form MI 403, "Ante Mortem and Post Mortem Inspection Summary", the actual slaughtering time for the species involved should be recorded by the final inspector in the block where he signs the form. A

statement such as "5 hours" will be sufficient.

11.17 Hogs affected with atrophic rhinitis may be identified by a characteristic disfiguration of the nose and complete or almost complete absence of the nasal turbinate bones. Small amounts of pus or catarrhal exudate may be found in the nasal sinuses. The soft tissues of the turbinates may be present but folded against the nasal cavity wall, since the supporting bony structures have disappeared. Abscesses or caseous necrotic lung lesions which are well circumscribed have been found in old cases and are probably due to inhalation of tissue particles or exudate from the nose during the active stage of the disease. This condition is usually localized and the tissues of the head which are used for food can be removed without contamination.

PART 13—TANK ROOMS AND TANKS

13.1 It is essential that sufficient tanks or melters and equipment of ample capacity are provided for the efficient handling of inedible and condemned material. Mechanical means should be provided to transfer condemned products into properly marked water-tight metal containers. The door between the viscera-separating or slaughtering department and the tank-charging room of the inedible products rendering department should be a solid, self-closing door, or double-action door completely filling the opening. Inedible and condemned material should not be

allowed to accumulate from one day to another except in unusual cases. Pipes, chutes, and similar equipment used to convey material from edible products departments to inedible products departments shall be effectively hooded and vented when necessary to prevent objectionable odors in edible departments. Inspectors should be intimately acquainted with the purposes of all pipe lines and chutes. Metal containers intended for use in handling inedible or condemned products shall be watertight and properly identified.

- 13.2 Besides knowing that tanks are properly equipped with condensers or other appliances to suppress odors incident to inedible rendering or drying, the inspector should know that the equipment is being used for the purpose intended in a manner that effectively controls objectionable odors.
- 13.3 Unborn calves shall be skinned in a properly enclosed area situated in other than an edible products room and in such a manner as to relieve the inspector of undue supervision.
- 13.4 Identifying marks or numbers on carcasses of animals tanked in accordance with 13.3 of the regulations shall be recorded on Form MI 406–2.
- 13.5 Some factors that are considered in granting permission to bring dead animals on the premises of an official establishment are:

(a) Adequate and suitable rendering facilities.

(b) Acceptable means of conveying the dead animals

to the tank-charging level.

- (c) Ability of the establishment to promptly handle and tank the dead animals in addition to inedible and condemned material usually present at the establishment.
- (d) Whether the receiving and handling of dead animals is likely to create a nuisance.

PART 14—TANKING AND DENATURING CONDEMNED CARCASSES AND PARTS

14.1 Identifying numbers or marks on condemned carcasses and products, the numbers of seals placed on the tanks, and the time of sealing and breaking the seals, together with the identity of the inspector, should be recorded on the daily tanking form.

- 14.2 It is not practical to require that contents of tanks be cooked a certain length of time to render them unfit for food purposes, because of the varied types of equipment, kind and quantity of contents, heating processes, and the like. The use of equipment such as crushers or hashers for pretanking preparation of condemned carcasses, parts, and viscera in the inedible products departments of most establishments has been found to give inedible character and appearance to the material. The use of washing equipment in connection with hashers for viscera does not affect this determination. In establishments using such equipment, the inspection supervision of condemned carcasses and product shall be maintained only until this material is crushed or hashed. Inspectors shall give the usual supervision to obtain prompt and sanitary handling of the crushed or hashed material like all other inedible materials in the inedible rendering department. Conveying systems, rendering tanks, and other equipment used in the further handling of the crushed or hashed material will not need to be sealed or locked. In cases where rendering tanks contain condemned material treated as outlined above, as well as condemned material not so treated, the tanks shall be sealed until all of the contents are destroyed for food purposes. If the condemned material is not rendered in the establishment where produced, sufficient crude carbolic acid or cresylic disinfectant shall be added to it at the time of crushing or hashing to positively preclude the use of the material for food purposes after removal from the establishment.
- 14.3 The addition of excessive quantities of denaturing oil to rendered animal fat derived from inedible or condemned materials shall be avoided.

14.4 The denaturing oil or No. 2 fuel oil shall have distinct denaturing properties, both in odor and taste.

14.5 Kerosene, denaturing oil, or No. 2 fuel oil shall not be used to denature condemned carcasses or product when tanking facilities are not available. Crude carbolic acid and also cresylic disinfectants may be used for denaturing condemned carcasses or product.

14.6 Rendered inedible fat is not considered to resemble edible product if the inedible characteristics of either color, odor, or taste, singly or in combination, are readily apparent. In official establishments, full responsibility is placed on the inspector in charge and his

assistants to see that all fat derived from inedible or condemned material, which has the physical characteristics of color, odor, and taste of an edible product is denatured sufficiently to distinguish it from edible product.

- 14.7 Collecting, cooking, dyeing, and washing condemned livers which are to be used for fish food should be accomplished in equipment set aside for this purpose. All operations in this connection shall be conducted so as to create no nuisance and not interfere with inspection. These livers shall be kept under close supervision until they have been effectively denatured. Accurate temperature control and records should be maintained in order to assure freezing of livers condemned on account of fluke infestation and intended for use as fish food.
- 14.8 The increase in demand for pharmaceutical products prepared from bile has resulted in an acute shortage of bile. The Food and Drug Administration of the Federal Security Agency has ruled that bile from condemned livers of slaughtered cattle, sheep, and goats may be used in manufacturing certain drugs. The bile from condemned livers may be collected in the inedible products department of establishments or in the slaughtering department, provided adequate facilities are available and collection does not interfere with the sanitary handling of products or the conduct of inspection.

The following statements of general policy or interpretation by the Administrator of the Federal Security Agency are quoted from the Federal Register of March

10, 1950, and of April 29, 1950:

"* * * no hazard to public health will be involved in the release of such ox bile, after the addition to it of sufficient sodium hydroxide to give the mixture a sodium hydroxide content of not less than 5 percent, the mixture then being allowed to stand at least 24 hours. This agency (FSA) will not regard as in violation of the provisions of the Federal Food, Drug, and Cosmetic Act such alkalized and aged ox bile, if labeled 'Ox Bile and Sodium Hydroxide (or Ox Bile and Sodium Hydroxide Solution). Sodium Hydroxide not less than 5 percent by weight. For manufacturing use only,' together with a statement of the quantity of contents in the container (for example, '50 Gallons') and the name and address of the manufacturer, packer, or shipper."

"Bile from the condemned livers of sheep and goats

also may be released under the same conditions as outlined in the preceding paragraph, except that the words 'sheep bile' or 'goat bile,' as the case may be, shall be substituted for the words 'ox bile' upon the label. In the case of mixtures of bile from any two or all three of the sources mentioned, the label shall indicate the sources of such bile."

Such properly labeled tight containers which are thoroughly clean on the outer surface may be stored in the edible products departments and may be shipped from the establishment in the vehicles containing inspected and passed products.

PART 15—RENDERING CARCASSES AND PARTS INTO LARD, RENDERED PORK FAT, AND TALLOW, AND OTHER COOKING

15.1 Carcasses and parts passed for cooking shall be held under strict control at all times. Trucks and containers used to hold and convey product passed for cooking shall be conspicuously marked and equipped with a sealing device.

PART 16—MARKING, BRANDING, AND IDENTIFYING PRODUCTS

16.1 Material submitted by establishments through the office of the inspector in charge for Washington approval shall be carefully examined and reviewed to see that it meets the requirements of the applicable regulations. Only legible imprints of required markings should be submitted for approval or used in an official establishment. Approval of the marks of inspection appearing in newspaper advertisements, billboards, and the like is not necessary, although if the opportunity is afforded to preview such matter locally, the markings should conform to the standards. The mark of Federal inspection shall not be used in such advertisements in a misleading way.

16.2 The Meat Inspection Branch will furnish the initial brands bearing the inspection legend when inspection is inaugurated at an official establishment. The establishment will be required to furnish all additional brands, including replacements as they become necessary. When received, new brands shall be immediately delivered into the custody of a Branch employee and the approval and use of these brands shall be in accordance with the Meat

Inspection Regulations.

- 16.3 When the 21/2-inch rubber brands mounted on aluminum handles which are furnished by the Branch become unserviceable, the aluminum handles should be returned to the Meat Inspection Branch in Washington for reuse.
- 16.4 Brands bearing the inspection legend should be uniform in size and design. Establishments should order brands that are replicas of those furnished by the Branch. The diameters of these brands are 3/4-inch, 11/4-inch, 13/4inch, and 2½-inch.
- 16.5 The same degree of control should be exercised over brands (ink, hot ink, burning, etc.) bearing the marks of inspection or abbreviation thereof that are furnished by an establishment as over those furnished by the Branch. This control extends as well to the establishment's brands held in supply or storage rooms which have not been put into service. The owner or operator of an official establishment should make mutually satisfactory arrangements with the inspector in charge to carry out the foregoing.

16.6 The Washington office no longer maintains property records of metal brands bearing the inspection legend. It is not necessary to report lost or unserviceable brands to Washington. Unserviceable brands should be properly defaced and disposed of at the station.

16.7 Whether lost or unserviceable brands should be immediately replaced by the establishment is a matter to be determined by the inspector in charge. He determines the number of brands needed to properly meet requirements at the establishment involved.

16.8 There shall be kept at each station an up-to-the minute inventory of all brands bearing the inspection

legend, whether in use or in storage.

Application of the marks of inspection to clothing, walls, posts, and the like must be discouraged. Brands bearing the marks of inspection or other marks shall be kept reasonably clean while in use. Facilities for supplying ink to brands should be free from contaminating ma-A clear legible imprint of an approved brand cannot be made with a worn or mutilated brand. So-called grade brands, buyers' brands, and marks signifying rabbinical inspection should be placed so as not to obliterate, or be confused with, required markings.

16.10 The legibility of the marks of inspection has

been improved in some cases by drilling two small holes (about one-sixteenth inch in diameter) through the face of the hot-iron brands to permit the escape of steam that forms when the hot brand comes in contact with the wet surface of product. The use of cast steel burning brands has been found to result in improved and more legible inspection legend imprints on cured products.

16.11 Only approved branding ink shall be used. Purple branding ink is composed of "FD&C Violet No. 1 dye, water, alcohol, and sugar." Acetone may be added to shorten drying time.

A hot ink brand equipped with a thermostatic control to regulate the temperature of the electrically heated burning element has been found to greatly improve branding on meat, meat byproducts and meat food products. Ink for hot brands may be prepared without sugar, using an acceptable dye and specially denatured alcohol 23A (alcohol plus 10 percent of acetone) if desired.

Official grading terms such as Prime, Choice, Good, Commercial, and Utility, and the letters, AA, A, B, and C which are associated with these official grades of meat of cattle, sheep and calves, may be used in official establishments only on meat which is graded as such by an official representative of the Federal Meat Grading

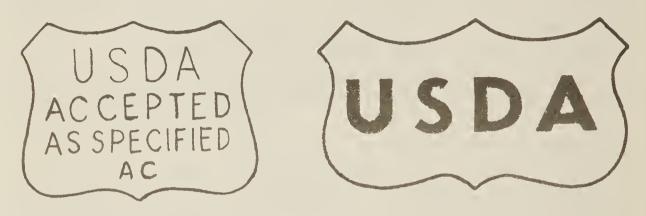
service.

Wholesale and retail cuts derived from carcasses bearing an official grade designation may be identified with the same grade designation as appears on the respective carcass from which the cut is derived.

These instructions do not apply to the terms "Army-AA," "Army-A," "Army-B," or similar terms applied to meats or the package thereof in conjunction with the standard Army veterinary inspection stamp by inspectors of the United States Army.

16.14 It is not necessary that impressions of grade markings applied to meat in official establishments under the supervision of an official representative of the Federal Meat Grading Service be submitted to the Washington office for approval if they are in conformity with the markings illustrated in this publication. However, such impressions should be approved by the inspector in charge prior to use. Grade markings, other than those illustrated, should be submitted to the Washington office for approval in the usual manner.

The grade rollers usually contain the initials of the grader, and many of the older rollers contain the abbreviation USDA, in addition to the marks shown below and on pages 71, 72, and 73.



- 16.15 After carcasses are washed and clothed each half shall be legibly marked "U. S. inspected and passed."
- 16.16 Carcasses conditionally passed for food on account of Cysticercus bovis as prescribed in 11.24 (f) of the regulations may be marked with the inspection legend and establishment number at the time they are placed in a freezing compartment maintained under lock or seal.
- 16.17 Calf carcasses shipped with the skin attached from one official establishment to another may be marked at the second establishment after the skin has been removed with the receiving establishment's number and inspection legend. This in no way relieves the responsibility of placing legible brands on each quarter of the carcass at the originating establishment. Cuts taken from carcasses marked at another official establishment may be branded with the inspection legend and identifying number of the official establishment in which the fabrication is done.
- 16.18 It is not practical to designate the location and number of brand imprints to be applied on carcasses because of variations in local conditions and in the further processing of the carcass. More than the required minimum marks of inspection may be placed on carcasses as local circumstances warrant.
- 16.19 Beef tenderloins should be individually marked with the inspection legend and establishment number before they leave the official establishment.
 - 16.20 Pork stomachs are considered meat byproducts

BEEF AND	CALVES	VEAL	YEARLING
LAMB U. S.	U.S.	U.S.	MUTTON U.S.
PRIME	PRIME CALF	PRIME VEAL	PRIME
U.S.	U.S.	U.S.	YRLING
CHOICE U.S.	CHOICE CALF	CHOICE	U.S. CHOICE
GOOD	U.S.	U.S.	YRLING
U.S.	GOOD CALF	$egin{array}{c} ext{GOOD} \ ext{VEAL} \end{array}$	U. S. GOOD
COMRCL	U.S.	U.S.	YRLING
U.S. UTILITY	COMRCL	COMRCL	U.S. UTILITY
U.S.	CALF	VEAL	YRLING
CUTTER	U.S. UTILITY	U.S. UTILITY	U.S.
U. S. CANNER	CALF	VEAL	CULL YRLING
U.S.	U. S. CULL	U.S. CULL	
CULL	CALF	VEAL	
MUTTON	ST	AG	BULL
U.S.	U.	S.	U. S.
	U. CHO		
U.S. CHOICE MUTTON U.S.	U. CHO ST U.	S. DICE AG S.	U. S. CHOICE BULL U. S.
U.S. CHOICE MUTTON	U. CHO ST U. GO	S. DICE AG	U. S. CHOICE BULL
U. S. CHOICE MUTTON U. S. GOOD MUTTON U. S.	U. CHO ST U. GO ST U.	S. DICE AG S. DOD AG S.	U. S. CHOICE BULL U. S. GOOD BULL U. S.
U. S. CHOICE MUTTON U. S. GOOD MUTTON	U. CHO ST U. GO ST U. COM	S. DICE AG S. OD AG	U. S. CHOICE BULL U. S. GOOD BULL
U. S. CHOICE MUTTON U. S. GOOD MUTTON U. S. UTILITY MUTTON U. S.	U. CHO ST U. GO ST U. COM ST U.	S. DICE AG S. DOD AG S. IRCL AG S.	U. S. CHOICE BULL U. S. GOOD BULL U. S. COMRCL BULL U. S.
U. S. CHOICE MUTTON U. S. GOOD MUTTON U. S. UTILITY MUTTON	U. CHO ST U. GO ST U. COM ST U. U. COM ST	S. DICE AG S. DOD AG S. IRCL AG	U. S. CHOICE BULL U. S. GOOD BULL U. S. COMRCL BULL
U. S. CHOICE MUTTON U. S. GOOD MUTTON U. S. UTILITY MUTTON U. S. CULL	U. CHO ST U. GO ST U. COM ST U.	S. DICE AG S. DOD AG S. IRCL AG S. LITY AG S.	U. S. CHOICE BULL U. S. GOOD BULL U. S. COMRCL BULL U. S. UTILITY BULL U. S.
U. S. CHOICE MUTTON U. S. GOOD MUTTON U. S. UTILITY MUTTON U. S. CULL	U. CHO ST U. GO ST U. COM ST U. U. COM ST U. CUTI	S. DICE AG S. DOD AG S. IRCL AG S. LITY AG	U. S. CHOICE BULL U. S. GOOD BULL U. S. COMRCL BULL U. S. UTILITY BULL
U. S. CHOICE MUTTON U. S. GOOD MUTTON U. S. UTILITY MUTTON U. S. CULL	U. CHO ST U. GO ST U. COM ST U. CUTI ST U. CUTI ST U. CUTI ST U.	S. DICE AG S. ODD AG S. IRCL AG S. LITY AG S. TER AG S.	U. S. CHOICE BULL U. S. GOOD BULL U. S. COMRCL BULL U. S. UTILITY BULL U. S. CUTTER BULL U. S. CUTTER BULL U. S.
U. S. CHOICE MUTTON U. S. GOOD MUTTON U. S. UTILITY MUTTON U. S. CULL	U. CHO ST U. GO ST U. COM ST U. UTI ST U. CUI ST U. CAN	S. DICE AG S. DOD AG S. IRCL AG S. LITY AG S. TER AG	U. S. CHOICE BULL U. S. GOOD BULL U. S. COMRCL BULL U. S. UTILITY BULL U. S. CUTTER BULL

BEEF AND LAMB	CALVES	<u>VEAL</u>	YEARLING MUTTON
USDA PRIME	USDA PRIME	USDA PRIME	USDA PRIME
USDA (CHOICE)	CALF	VEAL	YRLING
(USDA)	USDACHOICE	CHOICE	CHOICE
(G00D)	CALF	VEAL	YRLING
COMRCL	USDA GOOD	USDA GOOD	USDA GOOD
SUSDA	CALF	VEAL	YRLING
(UILLI)	USDA COMRCL	USDACCOMRCL	USDAUTILITY
	CALF	VEAL	YRLING
	USDATUTILITY	USDAUTILITY	
	CALF	VEAL	

rather than animal casings even though intended for use as containers of meat food products.

16.21 The use of metal clips or staples to affix labels or tags to meat food products is not permitted because of the possibility of metal inclusion in product.

16.22 Form M. I. 408-1 properly modified to clearly

MUTTON	STAG	BULL	
CHOICE	CHOICE	CHOICE	
MUTTON	STAG	BULL	The grade rollers usually contain initials identifying the grader,
SUSDA GOOD	USDA GOOD	USDA G000	such as
MUTTON	STAG	BULL	
USDAUTILITY	USDA COMRCL	COMRCL	
MUTTON	STAG	BULL	
	USDAUTILITY	USDAUTILITY	
	STAG	BULL	

describe the product transported may be used to cover the shipment of product to be further processed as provided for in 16.13 (a) of the regulations. This form is to be used, of course, in addition to the certification required in part 25 of the regulations.

16.23 If not otherwise specified, statements such as "cereal added," "dried skim milk added," "artificially colored," and the like should be placed on the product or on material to be attached to the product, in the order in which the additions normally are made in processing the article.

16.24 It is not practical to state specifically the exact size or weight of products customarily sold at retail intact.

Factors that must be considered are: class of product, geographical distribution, customer expectancy, etc.

16.25(a) Branding the word "tender" or any of its derivatives on heated and smoked pork products implying that the article has been subjected to a process lending a tenderizing effect is done only at the establishment at which the processing takes place. This is with the provision that the product is subjected to sufficient heat to attain an internal temperature of at least 140° F. This temperature is also required for pork products bearing the words "ready to eat" with the understanding that the finished product will have the characteristics of a ready-to-eat article. The process to be used and internal temperature that a product will attain shall be furnished when marking terms mentioned above are submitted for approval.

(b) Use of the term "cooked" or "fully cooked" on heated and smoked pork product is acceptable only when the processing results in product exhibiting the usual characteristics of a fully cooked article, such as partial separation of the meat from the bone, easy separation of the tissues, and a cooked color, flavor, and texture throughout the product. This usually requires a minimum internal temperature of 148° F. Proposals for the use of these terms shall be accompanied with the full description of the process and internal temperature attained when the marking material is submitted for approval.

16.26 Spice extractives may not be listed as spices in the list of ingredients but may, if desired, be listed as flavoring. Powdered onions and powdered garlic may be declared as flavoring, but onions and garlic used as such shall be listed as onions or garlic in the ingredient statement. Dehydrated onions (chips), dehydrated garlic, and

dehydrated potatoes should be listed as such.

16.27 As various kinds of cheese are prepared under definitions and standards of identity promulgated by the Food and Drug Administration of the Department of Health, Education and Welfare, the various cheeses used in the fabrication of meat food products should be shown in the statement of ingredients under the name outlined in the Standard of Identity. If the cheese ingredient is featured in the name of the product, it may be shown by the unqualified term "Cheese".

16.28 When tags, tissue strips, bands, and the like are

used on which to apply the list of ingredients, only applicable required markings should be included thereon. However, if nonrequired features are added, then all of the applicable required labeling features should be shown. To illustrate: If the name of the product is added on a tag bearing the list of ingredients intended for use on bologna, that side of the tag bearing the two features should be completed by adding the name and address of the firm.

The identity of all ingredients through all stages of fabrication of a meat food product must be maintained. A positive system which will assure that the statement of ingredients definitely reflects the kind and arrangement of all ingredients in the compounded products shall exist. Do not place reliance on information carelessly gathered.

Pork stomachs should be listed as such in the statement of ingredients, and not as pork tripe. Skinned

pork jowls may be listed as pork.
16.31 The terms "pork," "beef," "veal," "mutton," and "goat meat" are acceptable regardless of the anatomical derivation of the meat, except that tongues and hearts shall be specifically named; for example, pork tongues and beef hearts. The Trade Label Section may require specific declaration of meat ingredients on labels for such products as chili con carne, chili con carne with beans, corned beef hash, and ham spreads. A declaration such as "beef cheeks" or "pork cheeks" shall be used for untrimmed cheeks, that is, cheeks with the glandular material attached.

The designation "boned pork heads" is applicable to denote meat and meat byproducts from pork heads, provided the relative amount of muscle tissue is not

less than that normally present on pork heads.

16.33 The term "cereal" is acceptable to denote one or more meals or flours derived from cereal grains without more specific declaration.

16.34 Meat byproducts such as beef tripe, pork stomachs, pork livers, and pork fat, shall each be specifically

declared.

Previously cured meats used as a part of a fabri-16.35cated product may be declared as cured beef, cured pork, cured mutton, or cured goat meat in the statement of ingredients, or if the curing ingredients are listed in the statement, they may be shown as pork, beef, veal, mutton, or goat meat. When cured meats are used as a part of a fabricated product for which minimum meat requirements have been established, consideration should be given to the amount of added substances in the cured meat when calculating the formula on the fresh-weight basis.

16.36 Smoked meats such as ham or bacon used in fabricated product should be declared as "ham" or "bacon," as the case may be, in the list of ingredients so that the

smoked product will be identified.

16.37 Applicable marks of inspection shall be placed on the shipping container of permissible combinations of meat, meat food product, or meat byproduct, with articles other than meat, meat food product, or meat byproduct.

16.38 If an immediate or true container serves also as a shipping container, the marks of inspection, as well as

the other required features, shall be applied.

16.39 Markings other than the inspection legend and establishment number, applied to shipping containers by stencils, pencil marks, or in print, may be used with the approval of the inspector in charge. Such markings must not be false or misleading. They may be used in addition to required markings but not in lieu thereof.

16.40 When domestic meat labels have become detached from the shipping container of federally inspected product, they may be replaced with domestic meat labels of the receiving official establishment to facilitate further shipment after proper identification of the product is

made.

- 16.41 Hog carcasses and parts which are to be specially processed in connection with an animal disease eradication program may be moved to another plant, which may or may not operate under Federal inspection for such processing. Such carcasses and parts which are to be transferred shall be identified by using an inspection legend of a size different from that normally used to apply the marks of inspection at the establishment where the carcasses are slaughtered. For example, if hog carcasses and parts are regularly marked with the one and three-quarter inch inspection legend, then the one and one-quarter inch inspection legend should be used on those carcasses.
- 16.42 The marking required on the shipping container of inedible rendered fat need not be submitted to the Washington office for approval.

PART 17—LABELING

- 17.1 Although there is a connection between parts 16 and 17, each part is a separate and distinct entity. Both deal with the identification of product; part 16, by application of lettering or affixing of tags or labels directly to the product and part 17, by the labeling of the immediate cover or container. In some instances the fulfillment of the requirements of part 17 eliminates the necessity of compliance with part 16. In a broad sense, labeling requirements are to assure that a true and clear picture of the product is available to the consumer.
- 17.2 No reference to Federal meat inspection is permitted on labeling material except as it is embodied in the inspection legend.
- 17.3 Large containers such as tierces, drums, barrels, and fiberboard boxes which enclose loose or unpackaged product are true containers and as such must lend themselves to the labeling requirements. Whether or not all markings are applicable depends on the kind of product. It is not practical to apply a statement of ingredients to a container enclosing more than one type of fabricated product. See the marking requirements imposed by part 16.
- 17.4 Labeling may consist of a combination of printing, stenciling, box dies, and the like, for large-size true containers and for shipping containers. The use of crayons, marking brushes, and the like, are not acceptable for applying any required labeling features to such containers except the statement of the quantity of contents.
- 17.5 While stencils, box dies, and labels for large-size true containers and for shipping containers may be used with the provisional approval of the inspector in charge, it is emphasized that the inspection legend in any form must be approved by the Trade Label Section.
- 17.6 Containers bearing only approved markings and intended for use as an enclosure for federally inspected product may be used for display or advertising purposes without approval of the Washington office. It is not necessary to mutilate such containers to preclude their future use.
- 17.7 Properly labeled or marked product may be covered with loosely woven stockinette, provided the marks are plainly visible through the covering.

17.8 The establishment number may be embossed on

either the bottom or cover of hermetically sealed containers.

- 17.9 The date of canning shall be shown in code form or otherwise on the metal caps for hermetically sealed glass containers of fully processed product. The identity of the contents shall be shown in a similar manner when such identity cannot be positively established by other means. These features can be legibly and permanently applied with permanent ink, such as lithographer's ink, and a mechanical stamping device immediately after the cap is affixed to the glass container.
- 17.10 Labels used directly on and in connection with meat food products may be, and on occasion have been, sources of contamination. For example, water-soluble or fat-soluble ink, when used in the printing of labels, may become transferred to the product. The paper, or other substance constituting the label may contaminate the product through disintegration, presence of soluble components, or the like.

It would not be practicable for the Trade Label Section to control or anticipate such misuse of labels, even though this section does, in some instances, pick up probable objectionable conditions. The only adequate control is that exercised by inspectors in their supervision over labels at establishments. Inspectors shall, therefore, take precautions to assure that a label offered for use at an estab-

lishment is:

(a) Approved in accordance with the regulations.

(b) Used on the product for which it is applicable as set out in the terms of the approval and in the regulations concerning the composition of the product.

(c) Placed on product or container in such manner that all of the required features appear on the principal

display panel.

(d) Used on product which offers sufficient contrast in color so that the required features printed on transparent coverings are prominently displayed.

(e) Printed with permanent ink, all of the required

features being clearly legible.

(f) Such as will not result in contamination of the

product.

17.11 An inspector can readily see ink that has become transferred to the product, or a label that has disintegrated or corroded. But he faces a somewhat different

problem with substances used in the manufacture of plastics and paper coatings. Generally, manufacturers of plastic films, coatings and containers present to the Chemical Control Section, Washington office, samples of their materials and a statement of their composition in order to have their acceptability determined before making deliveries to inspected establishments. If the inspector has a question concerning the acceptability of such materials, he should send a sample of the material, with all identifying marks, the name and address of the manufacturer, and any other pertinent information, to the Chemical Control Section, Washington office, for advice. Aluminum foil (containing no lead) is acceptable from a toxicity standpoint for use in direct contact with product, although when in contact with well salted product corrosion may take place to an extent that would make its use undesirable.

17.12 When deciding on a common name for a product, the consumer's knowledge rather than that of the meat industry should be considered. For instance, in the packing industry "picnic" is the common name for a product, but since it is not well known to the public as such, it should be described as a "pork shoulder picnic" in order to identify it adequately. The name of the product applies to the finished article; the ingredients are listed in the order of the quantities that were used in the preparation of the product.

17.13 When fried pork skins are prepared from skin removed from smoked pork bellies, names such as "fried pork skins," "fried bacon skins," or "fried bacon rinds," may be used to designate the finished product. When labeling material is submitted for approval, the kind of skin used in the product should be stated.

17.14 If the term "spice" or "spices" is used in the list of ingredients, it must refer to whole or ground natural spices. Spices may, however, be covered by the general

term "flavorings" in the list of ingredients.

17.15 When the term "farm" or "country style" is used in connection with sausage, the product must be prepared with natural spices to the exclusion of oleoresins, essential oils, and other spice extractives.

17.16 Although nearly every ingredient in a product contributes to its flavor, such substances as parsley, pistachio nuts, pimientos, and pickles, which are not added to

a product solely for flavoring purposes, must be specifically named. Do not include them under the broad term "flavoring." However, ground parsley may be shown as flavoring.

17.17 Pimento is applicable to allspice, whereas pimiento refers to the cone-shaped thick walled Spanish sweet pepper. Other varieties of sweet peppers, such as the common bell-shaped variety, are listed as sweet peppers.

17.18 The following shall apply in listing the ingredi-

ents used in the preparation of meat food product:

(a) The terms "pork," "beef," "veal," "mutton," and "goat meat" are acceptable regardless of the anatomical derivation of the meat, except that tongues and hearts shall be specifically named, for example, pork tongues and beef hearts. The Trade Label Section may require specific declaration for meat ingredients on labels for such products as chili con carne, chili con carne with beans, corned beef hash, and ham spread. A declaration such as "beef cheeks" or "pork cheeks" shall be used for untrimmed cheeks, that is, cheeks with the glandular material attached.

(b) Meat byproducts such as beef tripe, pork stomachs, pork livers, and pork fat shall be specifically de-

clared.

(c) The designation "boned pork heads" is applicable to meat and meat byproducts from pork heads provided the relative amount of muscle tissue is not less

than that normally present on pork heads.

(d) The term "cereal" is acceptable to denote one or more meals or flours derived from cereal grains without more specific declaration. Bean flour, soya flour, or potato flour shall be declared by name because they are not classed as cereal.

(e) The foregoing should not be construed to invalidate approval of labels bearing more specific ingredient declarations than those mentioned in (a), (c), and (d), nor to prevent the use of such designation when

desired by the establishment.

(f) When dehydrated celery, dehydrated garlic or dehydrated onions are used as seasoning agents for meat or meat food products, their presence may be reflected in the statement of ingredients on labeling material as "celery," "garlic," or "onions" as the case may be.

17.19 Pork fat shall be declared as such in the statement of ingredients. As a guide for judging the distinction between pork and pork fat, skinned pork jowls may be declared as "pork" but clear fat backs and clear shoulder plates must be declared as "pork fat."

17.20 There have been many questions concerning the tissues which may be included under the general terms "cheek trimmings" and "tongue trimmings." For uni-

formity, the following shall apply:

(a) The tissues resulting from converting cheeks to cheek meat shall be identified as "cheek trimmings" (preceded by the name of the species from which de-

rived).

(b) The term "tongue trimmings" includes the entire mass of tissue, except cartilage and bone, obtained through converting long-cut tongues to short-cut tongues. Such term should be further identified accord-

ing to species.

(c) When the muscular tissue is removed from tongue trimmings, the resulting mass shall be identified as "salivary glands and fat" (preceded by the name of species from which derived); the muscular tissue may be identified as "beef," "veal," "mutton," "pork," or "goat meat," as the case may be.

(d) Trimmings derived from the tongue itself shall be identified as "tongue meat," preceded by the name of species from which derived. Tongue meat shall not include any of the tissues described in paragraph (b) and

(c) above.

17.21 Ingredients such as cracker meal, macaroni, and similar substances which in themselves are fabricated from various ingredients may be declared as such instead

of listing the individual component parts.

17.22 It has not been required that the street and number be included on labels if the firm could be located through a telephone or city directory. The city and State are sufficient. If the location of a firm is given as other than the manufacturing location, the city should be qualified by a term such as "general office."

17.23 The statement of net weight or measure shall be expressed in the largest applicable unit. Therefore, 1

pound is used instead of 16 ounces, and 1 pound, 4 ounces, in lieu of 20 ounces. However, small packages of sliced bacon may be shown as containing ½ pound or 8 ounces; packages of sliced dried beef may be labeled ¼ pound or 4 ounces.

17.24 Official establishments have proposed the use of approved labeling material for "Vienna Sausage," "Vienna Sausage, Cereal Added," "Vienna Sausage, Dried Skim Milk Added," and "Imitation Vienna Sausage," "Packed in either Water or Brine," bearing a net-weight statement of 3½ ounces on size 208 x 208 cans. This size of container is designed to hold 4 ounces of sausage. Packing less than 4 ounces of these products in this size of container results in deception.

17.25 There have been instances in which the weight of the paper and other packaging material used to wrap such product as fresh pork, beef cuts, and carcass meat was included in the net-weight statement. In determining compliance with the regulations, the inspector shall see that all wrapping and packing materials are included in the tare weight, and not in the net weight.

17.26 A statement of the gross and tare weights in lieu of the net weight on such containers as tierces, barrels, drums, boxes, crates, and large-size fiberboard containers

is acceptable.

17.27 It has not been required that meat and meat food products in casings be marked with a statement of quantity of contents; however, no objection is offered to providing on the casing space for applying the weight such as an opaque area preceded by the words "Net Weight." The presence of such facilities should not be construed to mean that the weight must be shown before the product leaves the establishment. However, if the casings are marked with a statement of quantity of contents, the inspector should check to see that such statements are accurate.

A new merchandising practice has developed in the industry which consists of enclosing products such as ring bologna, ring liverwurst, pepperoni and salami in plastic film bags. Such packages are required to bear a label showing all of the required features of a trade label, including a statement of quantity of contents.

17.28 A review of the merchandising practices incident to the sale of prepackaged meat and meat food prod-

ucts in self-service departments of retail stores indicates that there is a definite consumer demand for frankfurters, wieners, pork sausage, and breakfast sausage, packed at catch weights. Accordingly, it is not required that these commodities be packed at uniform weights of 8 ounces, 12 ounces, or 1 pound. So that the labels for such products shall not be misleading, the statement of quantity of contents shall be shown with the same degree of prominence as the other required labeling features, including the name of the product.

- 17.29 Systematic controls should be maintained at all times to check the quantity of contents. It is not practical to state definitely how many units per hour or per carton should be weighed or measured, owing to many variable factors. Inspectors, however, must assume the responsibility of this labeling to the fullest extent, making such tests as are necessary. Keep in mind that time, temperature, altitude, storage, and packing practices are some of the variable factors that must be considered. Deceptive filling of containers must not be permitted, even though a correct statement of the quantity of contents is shown.
- 17.30 In most cases, the determination of net weight requirement can be made at the time of packing or manufacture. However, in some instances, especially when imported products and products such as canned frankfurters are being packed, the net weight of the completely processed article is checked. The inspector has the responsibility of determining whether a particular lot of product complies with the net-weight statement. In order that a uniform method of determining net weight may be used throughout the Meat Inspection Branch, the following procedure is outlined:

(a) The weight of the unopened can is tabulated as

the gross weight.

(b) The weight of the clean, dry can is tabulated as the tare weight. After the product is removed as completely as practical with a spatula or similar instrument, the can should be washed in hot water to remove the adhering meat and fat and then thoroughly dried.

(c) The difference between the gross weight and the

tare weight equals the net weight.

17.31 After checking the net weight of several cans, it is possible to determine the net weight of additional cans

without opening them by subtracting the average tare weight from the gross weight of the unopened can. However, the number of cans opened should be sufficient to establish a tare that will be representative of the lot. The number of cans necessary to establish a reliable average tare will depend on the uniformity of the can weights. If the difference in weight between the lightest and heaviest of the first six cans opened is no more than one-eighth of 1 ounce, the average of the first six cans will probably suffice as an average for the lot. If the difference in weight between the lightest and heaviest is approximately three-sixteenths of 1 ounce, six more cans should be opened. This refers particularly to cans having a capacity of approximately 12 ounces. The tare weight of larger cans may vary in proportion. Each lot of product should meet the following requirements:

- (a) The average net weight of the cans checked should equal at least the stated net weight.
- (b) There should be as many cans that are overweight as are underweight.
- (c) The underweight should equal the maximum tolerance on not more than 20 percent of the total. (The incidence in a hundred cans of a very few containing a small quantity below the maximum underweight with the average at least equalling the stated net weight is not sufficient to reject a lot if the other net weight requirements are met.)
- 17.32 If a canned meat food product consists entirely of material that is nutritious and suitable for food, the statement of net weight should include the total weight of contents. However, if the canned meat food product is prepared with some packing substance not customarily used for foods such as water, brine, or agar, then the stated net weight should be the weight of the meat or meat food product, exclusive of packing material, taken after the article has been packed several days. For example, in the case of pigs' feet in vinegar pickle, the stated net weight should be the drained weight of the pigs' feet and in the case of whole ox tongues in agar, the stated net weight should be the weight of the ox tongues, exclusive of agar. Some products, such as cooked pigs' feet, cooked lamb tongues, and cooked sausage, may be packed in a vehicle at such weight as to result in regaining the mois-

ture that has been lost in cooking before the product leaves the establishment.

17.33 (a) The following underweight tolerances are allowable for comminuted products and for liquid and partly liquid products in which the liquid is included in the net weight:

3/4 of 1 ounce	For a 6-pound can
½ of 1 ounce	For a 4-pound can
% of 1 ounce	For a 2-pound can
5/16 of 1 ounce	For a 1-pound can
¼ of 1 ounce	For a 12-ounce can
3/16 of 1 ounce	For an 8-ounce can
1/8 of 1 ounce	For a 6-ounce can or less

(b) The overweight tolerances for comminuted products and for liquid and partly liquid products in which the liquid is included in the net weight are allowed as follows:

2½ ounces	For a 6-pound can
2 ounces	For a 4-pound can
1½ ounces	For a 2-pound can
1 ounce	For a 1-pound can
¾ of 1 ounce	For a 12-ounce can
½ of 1 ounce	For an 8-ounce can
% of 1 ounce	For a 6-ounce can or less

- (c) The overweight should not result in an overstuffed appearance of the can. Overstuffed cans should be handled in accordance with the regulations. The following net weight tolerances are applicable to frankfurters packed in brine in consumer-size cans:
 - (1) The overweight should not exceed the weight of one whole link.
 - (2) The average net weight should equal the stated net weight.
 - (3) No underweight should exceed 4 percent of the
 - stated net weight.
- (d) The average net weight for the large institutionalsize cans should equal the stated net weight. The overweight should not exceed 2 percent of the stated net weight and the underweight should not exceed 1 percent of the stated net weight.
- 17.34 The mark of inspection in whatever approved form it may appear is the symbol of our service that reaches the public intimately. It erases from the consumers' mind the question of whether the product on which it appears has been subjected to complete inspec-

tion. It is our certification that the product has been carefully inspected and found to be sound, wholesome, and fit for human consumption at the time of shipment and that the labels are not deceptive or misleading. Therefore, we should take great pride in its significance and exercise constant vigilance in its application.

The master label file system in the Washington office consists of a combination of microfilm and International Business Machines card records. Each label with all material pertinent thereto is photographed. To keep the photographic work at a minimum and for uniformity in photographing labels and other material presented in connection with requests for approval, we ask that you adopt a form for transmittal of sketches and labels like the one on p. 87. One copy of the label or material being presented for approval should be attached to the transmittal form with a paper clip or only one staple for use in the Washington office. Mount all other copies to the transmittal form in any manner that suits your needs. Do not, however, cover the space provided for the approval stamp. Establishments should prepare a supply of the form for their own use on letter-size paper. Your cooperation will assist greatly in the operation of the master label file and will be appreciated.

17.36 Frequently, the Washington office stamps an addition on labels that are approved. These constitute a condition or requirement that becomes a part of the

approval.

17.37 Attention is directed to a difference in the marking and labeling requirements for imitation sausage. Since it is apparent what product is being imitated, it is sufficient to apply the single word "Imitation" directly on the product as set forth in part 16, but part 17 requires that the word be followed by the name of the sausage imitated and the statement of ingredients.

Imitation sausage packed in properly labeled containers having a capacity of 1 pound or less, and of a kind usually sold at retail intact, need not bear the mark "Imitation" on each link or piece, provided no other marking or labeling is applied to each link or piece. The container shall be labeled in accordance with part 17 of the meat inspection

regulations, as amended.

17.38 Where certain fixed minimum or maximum quantities of particular ingredients are prescribed in the

Chief Meat Inspection Branch washking, p. c.	FOR USE OF THE W	THE WASHINGTON OFFICE, NEAT INSPECTION	SPECTION BRANCH
FOR APPROVAL (CHECK CRE)			
FINAL SKETCH FOR USE UNTIL	Received Stamp	Approved Stamp	Distribution Stamp
DATE SKETCH APPROVED EST NO.			
TYPE OF MATERIAL: SUCH AS CASINGS, WRAPPERS. CARTONS, ETC.			
FORMULA AND METHOD OF PREPARATION			
REMARKS			
SIGNATURE OF EST. REPRESENTATIVE (Date)			

composition of designated product, it is the responsibility of the inspector in the department to obtain strict adherence to the requirements. Laboratory analysis may be obtained when necessary. The ingenuity of the inspectors may be taxed at times to determine the percentage requirements. It entails a thorough knowledge of the product and its preparation. Company figures alone shall not be relied on.

- 17.39 If the term "bacon" is used to describe a product other than the conventional item which is prepared from the side of a swine carcass, it shall be qualified as to its origin in terms such as "pork shoulder plate bacon."
- 17.40 Product designated "Dry Salt Cured" may contain a curing solution which was injected directly into the tissues but not through the circulatory system before it is covered with dry curing mixtures. It may be momentarily moistened to facilitate initial salt penetration. However, the term does not apply to product placed in curing solution. Product identified as "Dry Cured" shall not be injected with curing solution.
- 17.41 Tongues and brains of sheep and lambs are practically indistinguishable and may be designated either sheep tongues or lamb tongues and sheep brains or lamb brains. Large calf livers and hearts may be designated beef livers and beef hearts.
- 17.42 Gelatin is not a permitted ingredient of sausage, luncheon meat, meat loaves, and the like.
- 17.43 There is a clear difference between a loaf prepared with meat to the exclusion of meat byproducts and labeled as meat loaf, beef loaf, pork loaf, or similar name and a comparable product fabricated from various combinations. Dried skim milk and soya flour must be declared as part of the name of the product as well as included in the list of ingredients on a label for a product called "meat loaf" or "pork loaf" or the like. The word "loaf" refers to a form in which the product is prepared rather than to a specific article of food, and when used to designate a product, it must be followed by the list of ingredients.
- 17.44 "Chopped beef" shall consist of chopped fresh beef without the addition of beef fat as such, and the product should not contain more than 30 percent of fat.
 - 17.45 Ham cooked in the conventional manner, which

does not include the use of boiling water, should be labeled "cooked ham," not "boiled ham."

- 17.46 The words, "tender" or its close derivatives, and "ready to eat," may be used in connection with processed pork cuts such as hams that have been heated long enough to attain an internal temperature of at least 140° F. "Ready to eat" is approved if the finished product is actually a ready-to-eat article. The words "cooked" or "fully cooked" may be used in connection with pork cuts which have been subjected to processing which results in the product exhibiting the usual characteristics of a fully cooked article such as partial separation of the meat from the bone, easy separation of tissues, and a cooked color, flavor and texture throughout the product. This usually requires a minimum internal temperature of about 148° F. Labeling materials submitted for approval should include, on each copy, the method of processing and internal temperature obtained.
- 17.47 (a) "Detached skin" refers to portions of skin from which most of the underlying fat has been removed, such as skin removed from bacon intended for slicing and skin removed in the process of closely skinning hams, shoulder cuts, and fat backs. If the removal of portions of skin is incidental to the removal of a considerable proportion of the underlying fat from the ham, shoulder, back, or the like, preparatory to the rendering of such fat, then the portions of skin so removed shall not be regarded as detached skin and may be included with the fats, and rendered into lard. Ham facings are not regarded as detached skin.

Fresh ham skins, fresh pork shoulder picnic skins, and the like may be used in the rendering of lard when, taken as a lot, they have at least 65 percent trimmable fat.

(b) "Tails" mean the skin-covered portion only.

(c) "Windpipes" include the larynx, trachea, and bronchi.

(d) "Scrap fat" includes particles of tissue such as may be collected as a result of splitting the carcass, sawing the carcass or parts and washing blood-stained parts. It does not include fatty tissues of the thoracic, abdominal, and pelvic cavities, the trimmable fat attached to the organs in such cavities, or the particles of fat that may be scraped from the surfaces of the three cavities, provided the fatty tissues are reasonably free from

muscle tissue, blood, and large blood vessels. Fresh, clean, sound fat obtained in the fleshing of fresh pork skins may be rendered for lard.

(e) "Skimmings" include unrendered fatty tissues and rendered fat such as may be collected from receiving vats under rendering tanks or from cooking vats.

(f) "Settlings" include "bottoms" such as accumulations of "scrap," water, and other material and the rendered fat therewith from receiving, settling, and storing vats.

(g) "Pressings" include:

(1) Fat pressed from the residue incident to rendering lard, other than by steam rendering, may be regarded as lard if it is promptly made sufficiently free of sedimentary scrap and water. Fat pressed from residue incident to rendering lard, including steam rendering, shall not be re-rendered for lard-making purposes. Such fat may be re-rendered for rendered pork fat making purposes.

(2) Fat pressed from the residue incident to rendering rendered pork fat, and fat pressed from the residue incident to rendering lard, may be regarded as rendered pork fat if it is promptly made sufficiently free of sedimentary scrap and water. Fat pressed from the residue incident to rendering rendered pork fat may

be re-rendered to make rendered pork fat.

17.48 (a) Unpressed residue incident to rendering lard and rendered pork fat, other than by steam rendering, may be re-rendered for rendered pork fat making purposes. Unpressed residue incident to rendering lard and rendered pork fat shall not be re-rendered for lard-

making purposes.

(b) Pressed residue incident to rendering open kettle rendered lard and open kettle rendered pork fat, which has not been pressed by means such as an expeller or a hydraulic press, may be re-rendered for rendered pork fat making purposes. All other pressed residue incident to rendering lard and rendered pork fat shall not be re-rendered for edible purposes.

17.49 The term "refined lard" is applied to openkettle rendered, prime-steam, or dry-rendered lard that has been run through a filter press with or without the

addition of a bleaching agent.

17.50 (a) Pork jowls may be rendered into lard.

- (b) Pork jowls intended for use in fabricated products or in rendering should be completely sliced or deeply scored from the "Meat" surface downward in sections one inch apart longitudinally and the cut surfaces observed for any unacceptable conditions. Mechanical slicing of frozen jowls in blocks does not permit satisfactory examination. However, mechanical slicing of unfrozen jowls with acceptable inspection of each cut surface immediately after slicing may be permitted. Facilities for cleaning and sterilizing contaminated equipment should be provided.
- 17.51 When the term "manteca" or "manteca pura" is used as a name of a product, the English designation "lard" or "rendered pork fat," as the case may be, should follow in close proximity.
- 17.52 The terms "animal fat" and "meat fat" may be used synonymously to identify rendered fats obtained from cattle, sheep, swine, or goats in the name of product and ingredient statement for such meat food products as shortening and uncolored oleomargarine. The terms "animal fat" and "meat fat" shall not be used to identify such well known single commodities as lard, rendered pork fat, oleo oil, oleostearin, oleo stock, and the like when prepared and packed as such.

17.53 Tripe and untrimmed cheeks are not customary ingredients of chili con carne. Although beef heart meat is permitted in chili con carne, beef hearts are not. The term "beef heart meat" applies to beef hearts minus the

auricles, or so-called heart cap.

17.54 Pork stomachs, pork skins, pork snouts, and other meat byproducts, except fat, are not customary ingredients of a product labeled "Braunschweiger." The name "liver sausage" is inaccurate for a product prepared with meat byproducts to the exclusion of meat.

17.55 For an inspector to exercise proper inspectional control over the labeling of meat and meat food products, it is necessary that he have a clear understanding of the applicable regulations and be thoroughly familiar with the preparation and composition of each product prepared under his supervision.

17.56 The name used to designate an article should be the common name, if any, and one which clearly describes the finished product; for example, a product labeled "beef and gravy," "pork and gravy," "pork with barbecue

sauce," "meat balls with gravy," or the like, should contain more meat or meat balls than gravy or sauce in the finished product. If upon examining representative samples of the finished product the inspector finds more gravy or sauce than meat, names such as "gravy and beef," "gravy and pork," "barbecue sauce with pork," and "gravy with meat balls" would be accurate and informative.

17.57 The statement of ingredients should show the ingredients listed in the order of their percentages according to the amounts used in preparing the product rather than in the order of predominance in the finished product. For example, cooked sausage may contain 10 percent added water; however, it is customary to use a greater amount of water in its preparation. In such case water should be declared in the statement of ingredients in the order of its predominance by comparison with the other ingredients.

17.58 Potted and deviled meat food product should not contain added moisture, but when water is used to replace the moisture lost incident to precooking some of the meat or meat byproduct ingredients, then water constitutes an ingredient of the product, and should be declared according to the quantity used.

17.59 It is the responsibility of the inspector to see that all meat and meat food products prepared under his

supervision are properly labeled.

17.60 (a) A uniform label filing system to aid inspectors wherever assigned is outlined below. Labeling and marking material is filed in regular filing cabinets as follows:

(1) A separate file is maintained for each official establishment.

(2) The material is filed in chronological order with

the last approval in front.

(3) The files are subdivided alphabetically with material filed under the appropriate letter according to the name of product as, for example, under B—bacon, bologna, brains, braunschweiger, ground beef, corned beef, pork shoulder butt, beef and gravy; under C—capocollo, cervelat, cutlets (pork, veal, etc.), chili con carne: under M—luncheon meat, meat food product (potted, deviled, etc.); under P—pepperoni, prosciuto, pudding (liver, tongue, blood, etc.); under S—shorten-

ing, steaks, pork sausage, Polish sausage, vienna sausage, soups; and under T—tongue, thuringer, tails (pig, ox, and ox tail joints). Material which cannot be readily classified alphabetically is filed under "miscellaneous." Very few items should fall in this class. No other subdivision of the file is necessary, and no distinction is made in the various types of labeling material, such as inserts, wrappers, brands, etc. All correspondence pertaining primarily to labeling or marking devices should be filed with the material with which it is concerned. If a letter concerns more than one label, a cross reference is noted on the label.

- (4) Labeling and marking material which has been granted approval for a limited period of time is filed separately from regularly approved material in order to facilitate removal from the files at termination of approval period.
- (5) Material approved in sketch form is filed separately from regularly approved or limited approved material. To keep the number of sketch approvals on hand to the minimum, sketches should be discarded when finished material prepared in accordance with the sketch is approved.

(6) No card or other index system is necessary when

labels are filed under the above system.

(7) At small establishments such as slaughtering plants where only a few marking and labeling devices are used, we have found it is generally satisfactory to file all approved material chronologically in one jacket without subdivisions.

(8) (a) Mounting of labels, inserts, etc., on thin manila or cardboard sheets 11³/₄ by 9 inches or 11 by 8¹/₂ inches in size, before filing, aids greatly in keeping the material in good condition and also makes for a more orderly and neat file. The approval number and date of approval can be written on the upper righthand corner of the manila sheet if it is not readily visible elsewhere.

(b) An inspector in charge should see that the label file at his station is set up in accordance with the sys-

tem just described.

17.61 The term "Cutlet" when used in conjunction with the word "Veal" denotes a single slice of veal taken from the round. The thickness of the slice can vary; how-

ever, the combining of several thin slices is not permitted when the term "Veal Cutlet" is used.

PART 18—REINSPECTION AND PREPARATION OF PRODUCTS

- 18.1 When a particular article has become unclean by accidental contamination and can be cleaned with water, care must be taken to see that pieces are promptly washed individually under a spray of running water. Separate equipment should be provided for this purpose. The use of hand-washing basins for cleaning product is not permitted. Unclean articles referred to in this paragraph must not be accumulated or massed before or during the washing operation.
- 18.2 It may be necessary to heat or otherwise treat products that are suspected of having absorbed odors that are not readily discernible by usual methods of examination.
- 18.3 Edible rendered fats containing tank water in first stages of sourness may be reprocessed if the handling is begun promptly after its detection. There is no provision for rehandling for food purposes rendered fats which contain tank water beyond the first stages of sourness. The fats may not be mixed with sound edible product in any proportion as a recovering process. The product should be retained until further approved processing determines its final disposition. The treatment of the rendered fats may be undertaken immediately without waiting for a report from the laboratory.

18.4 The requirement of section 18.1 (b) (1) of the regulations does not change the status of such relatively stable products as lard, sliced or slab bacon, sliced dried beef, and the like which are sometimes distributed in

hermetically sealed containers.

18.5 Unclean frozen product shall be made clean in an acceptable manner before being defrosted in water or pickle. Care must be exercised to see that no loose material from containers is allowed to enter the defrosting solution.

18.6 Occasionally product is reinspected, condemned, and destroyed for food purposes and no complete record of the transaction reaches the inspector in charge. In order to determine accurately the inspection requirements as well as the facilities necessary for disposal of

condemned material, such information should be readily available. Unclean paunches, stomachs, chitterlings, and unrendered fat are examples of products which are frequently retained and the establishment decides to dispose of the material as inedible rather than spend the necessary labor to place it in acceptable condition. In such cases, the action taken by the inspector in retaining the product is equivalent to a decision that the product is condemned unless it is cleaned or otherwise made acceptable for food purposes. Such products should then be reported as condemned on reinspection. When facilities are not available for weighing condemned products, an estimate of the weight will be acceptable.

- 18.7 Cod, kidney, and breast fats bearing the marks of Federal inspection may be admitted into official establishments for edible purposes provided the fats are clean, sound, and otherwise fit for human food.
- 18.8 Occasionally inspectors misunderstand action taken by the Washington office with respect to equipment and materials proposed for use by inspected meat-packing plants. The following is to clarify the actions taken by the Washington office and the responsibilities of each inspector at the establishment where the equipment or material is offered for use:

It is understandable that the manufacturer of equipment or the distributor of such materials as detergents, insecticides, rodenticides, plastics, lacquers, and the large variety of probable ingredients of meat food products desires to have the inspector in charge and the Washington office determine the suitability of the particular article for use under Federal meat inspection. In fact, it is necessary that the Washington office review proposals to use such new articles and materials so as to maintain a high degree of uniformity in applying our requirements throughout the meat packing industry. In reviewing these proposals, the Washington office determines their suitability under existing regulations and requirements and endeavors to ascertain whether their use by an inspected establishment will or will not create an objectionable condition. Frequently, arrangements are made for a trial before final decision is made.

Even though the Washington office makes every effort to determine the suitability of a new product, a favorable decision does not constitute blanket endorsement. Final determination with respect to its use in any particular plant is the responsibility of the local inspector. The decision by the Washington office that any article or material is generally suitable for use under Federal meat inspection constitutes assurance to the inspector that its use should be permitted so long as there is no local condition which would indicate otherwise. It is the inspector's responsibility to make this local determination and to inform the Washington office of adverse findings.

To summarize, favorable decision by the Washington office with respect to any new article or material offered for use at an inspected establishment does not relieve the local inspector of his responsibility to see that it is suitable for the purpose intended, and is properly used.

- 18.9 Since ozone affects the sense of smell and also masks odors, thereby interfering with inspection, the use of lamps or equipment that produce ozone in such quantity as to interfere with inspection is prohibited in official establishments other than in coolers set aside for the so-called quick-aging of beef.
- 18.10 Lye solution for removing the outer surface of vegetables has been permitted provided the lye solution is completely removed before the vegetables are processed further.
- 18.11 Only hardwood or hardwood sawdust should be used for smoking product. The resinous woods are unacceptable for smoking. The use of steam in smokehouses has been permitted but a combination of steam and smoke is not sanctioned. The amount of steam should not be so great that its use will result in excess condensation and

consequent dripping.

18.12 Cover pickle that is clear, free of sediment, and does not show evidence of any decomposition may be reused. Pickle which escapes during the pumping of the blood vessels may be salvaged for reuse provided it is handled in a satisfactory manner and is effectively sterilized and filtrated. When mechanical pumping devices are used for injection of curing solutions into bellies, the pickle which escapes from the product and that which is spilled directly from the pumping needles may be reused if the collection and filtration of the pickle are accomplished promptly and continuously.

18.13 The use of lead seals or other identifying devices consisting in whole or in part of lead, which are directly

attached to the meat or product or which come in contact with meat or product other than dried beef, summer sausage, and similar dried meat or product, is not permitted.

- 18.14 Metals such as copper, cadmium, lead, and the like are not acceptable for use in the construction of containers, fittings, pins and similar devices when such metal comes in contact with product.
- Metal drums coated on the inner surface with lacquer may be used provided the coating is smooth, odorless, hard, and does not peel or blister. The resin or lacquer shall be approved by the Washington office before its use is permitted. Such approval is usually given only to the manufacturer, and then only after submission of a statement showing the chemical composition, intended use, method of application, action while in contact with water and fat, and any toxicological data deemed necessary. If the material is then considered unobjectionable, the use of a trial lot is authorized at the request of an official establishment, and the suitability of the material under actual operating conditions is observed by the inspector in charge. If the inspector's report is favorable, the Washington office approves its use for the purpose originally proposed.

18.16 Hog stomachs may be used as containers of meat food products, but when used as such they will not be classed as animal casings. They will be classed as an edible

organ and must be prepared in a cleanly manner.

18.17 When abomasi of calves are used to produce rennet, they do not need to be thoroughly clean. They may be emptied of their contents in an edible products department provided the operation creates no nuisance. The containers should be marked "calf rennets" and "inedible."

18.18 Finished casings prepared at unofficial establishments may be received into official establishments and used as containers of meat food products provided they present no objectionable condition. Unsound casings shall be rejected. Animal casings of foreign origin should not be rejected solely because of their dark color. Casings are inspected when they are presented for use as containers. Sewed animal casings shall be carefully examined before use, particularly at the inner seams. Excessive fat shall be removed from animal casings before use. Hog bungs shall be free of hair and scurf at the crown end.

18.19 Animal casings for use as containers shall be

thoroughly flushed throughout their entire length before stuffing. Whether this can be done singly or collectively can be determined at the establishment by the inspector. Animal casings that have been flushed prior to receipt at the establishment and are packed in a salt solution or salt and glycerin solution may be used as containers after thorough rinsing and without additional flushing if found to be acceptable by the inspector.

18.20 If the lips from cattle, calves, sheep, and goats are used in the preparation of meat food products, they should be chopped to a fineness which will completely destroy the conical shape. Experience has demonstrated that the shape of conical papillae cannot be destroyed with any degree of certainty unless the lips are cooked and the mucous membrane removed prior to the chopping operation.

18.21 Some of the products in which bones or particles of bone may be found include the following: Tongue trimmings, brains, cheek meat, hearts, trimmings derived from neck bones, ribs, vertebrae, and heads. The inclusion of particles of bone in meat food products is a source of consumer complaints and should be guarded against by

close inspection.

18.22 Crushed or ground bone is not a meat food product and therefore is not eligible to bear the marks of Federal inspection. Further, crushed or ground bone as such is not permitted to be used as an ingredient of a meat food product. This does not preclude the use of bone in the manufacture of soup stock which is intended as an ingredient of a meat food product. The bone-crushing operation may be conducted in the edible products department provided (1) the handling of the bones and their preparation does not create an insanitary condition or in any way interfere with inspection or preparation of meat food products and (2) that only clean sound bones derived from U. S. inspected and passed carcasses are used.

18.23 Cystic kidneys shall not be used for food pur-

poses.

18.24 Although intestines shall not be used as an ingredient of meat food products, some may be prepared for food purposes as chitterlings. Intestines prepared as chitterlings must be handled in a cleanly manner as an edible product and be thoroughly washed inside and outside. Chitterlings may be split during the cleaning pro-

cess; however, when not split, they must be turned so that the inner surface and the outer surface of the intestines are presented for inspection. All excess fat shall be removed and the finished product shall be free from excess water.

18.25 Clotted blood shall be removed from hog hearts before the hearts are chilled in the cooler.

18.26 All materials such as curing mixtures, seasonings, spices, tomato puree, cereals, dried skim milk, and the like, should be labeled to show the name of the article or a list of ingredients when delivered to the establishment. In addition, the materials should be enclosed in a sanitary container and should show the name and address of the manufacturer. Inspectors should reject materials which do not comply with these requirements. When a material meets these requirements and is one which has been approved for use in meat food products, the inspector should make the usual examination for acceptability. In those cases where a laboratory examination of the material is considered necessary, the sample form should show the complete identity of the material.

18.27 "Dried Skim Milk" (also known as "non-fat dry milk solids" or "defatted milk solids") has been approved for use with proper declaration in sausage and meat loaves. Dried buttermilk and calcium casineate have not been approved for use in meat food products. Mixtures of dried skim milk with other substances except as a minor ingredient of complex mixtures such as gravy mix or

breading mix are not acceptable.

18.28 No mixture containing albumin from inedible material has been approved for use in meat food products. Dried whey (food grade) conforming to the standard adopted by this Branch and sodium casineate have been accepted for use in the preparation of loaves (other than "Meat Loaves"), stews, soups, and imitation sausage. Dried whey and sodium casineate should not be accepted into official establishments when mixed with other substances except as a minor ingredient of complex mixtures.

18.29 Materials other than products which have been rejected for use may be removed from the establishment or destroyed within the establishment if the management so desires. In most instances, it will be well to notify the Food and Drug Administration and local health authorities of such action.

- 18.30 Most establishments preparing product containing beans have facilities for cleaning, picking, or otherwise eliminating unsuitable beans from a lot prior to inclusion in a meat food product. Therefore, when lots of beans are received at an establishment having such facilities, the beans should receive a preliminary inspection and may be brought into the establishment unless found to be affected with a condition such as heavy mold, sourness, or weevil larvae, webbing, or refuse which could not be removed by the cleaning procedures. Beans from an accepted lot should not be used in product until the cleaning process has removed all foreign material (stones, dirt, weed seeds, and cereal grains) and beans damaged by insects. Beans which are less severely damaged by insects (in which the seed coat is slightly affected) and those showing slight damage by frost, weather, or disease may be included in product. Broken beans and beans with the seed coat partially or wholly removed may also be included. Establishments not having bean-cleaning facilities should receive only beans which are entirely free of defects which make beans unsuitable for inclusion in product. All beans should receive a thorough washing before use.
- 18.31 Salt containing approved kinds and quantities of an anticaking agent may be used. These agents are usually tricalcium phosphate, calcium carbonate, or magnesium carbonate, used singly or in combination. However, this permission does not cover the use of these agents as such in meat food products.
- 18.32 Salt which comes in contact with meat or product shall be clean and free from extraneous materials, including rock or slate particles normally found in rock salt. The commonly used recrystallized or vacuum-pan granulated salt, with or without anticaking agent, is acceptable for this purpose.
- 18.33 Salt solutions used for curing, defrosting, or for wetting cloths prior to application to dressed carcasses shall be clear. The salt used to prepare the solutions shall be free from extraneous material which indicates contamination with filth but may contain insoluble mineral matter such as slate or rock particles.
- 18.34 Salt used to settle rendered fats shall also be free from extraneous material which indicates contamina-

tion with filth but may contain insoluble mineral matter which does not remain in the rendered fat.

18.35 Salt should be handled so as not to become soiled. Bins or other facilities for the storage of salt should be constructed in a sanitary manner so they may be readily cleaned and will protect the salt from contamination.

18.36 The equipment used for preparing salt solutions should be of sanitary construction and should be maintained in clean condition to avoid contamination of the solutions.

18.37 The congealing property of gelatin restricts its use in meat food products to those in which it would normally be an expected ingredient such as souse, jellied beef loaf, canned whole ham. It may also serve as a coating for such products as cooked ham and fresh cuts. However, it is not considered a customary ingredient of sausage.

18.38 The application of approved clear mineral oil or edible vegetable oil to the outer surfaces of dry or semidry sausage casings as an inhibitor of mold formation has been accepted. Such application must be made after the prescribed treatment for the destruction of possible live trichinae has been completed on applicable products.

18.39 The following are not considered normal ingredients of sausage: eggs, cheese, pickles, macaroni, vegetables. Blood, kidneys, and detached skin are not to be used in the preparation of such types of sausage as bologna, frankfurter, vienna, and braunschweiger.

18.40 Glycerin may not be added to product.

18.41 Ingredients such as dried or candied fruits, dehydrated vegetables, and fruit juices containing small additions of sodium benzoate or benzoic acid, sodium sulfite or sulfur dioxide, or combinations of these for the purpose of preserving the ingredient may be used in the preparation of those meat food products in which such ingredient is customary. For example: dried or candied fruits, including maraschino cherries, may be used for decorating cooked smoked pork cuts; dehydrated vegetables for preparing soups and hashes; and fruit juices for flavoring certain stews and soups. These preservatives need not be declared on labeling material for meat or meat food product.

18.42 Restrictions on the use of water or ice in the

preparation of luncheon meat and meat loaf are extended to canned chopped ham, canned chopped pork generally, and canned chopped mixtures of pork and other meats. The quantity of water or ice that may be added to luncheon meat and similar products is based on the percentage of ingredients going into the preparation of the product. Therefore, strict control is exercised at the time of preparation and is not based on the finished product. The amount of water used in the fabrication of the product shall be listed in the ingredient statement according to its percentage at the time of manufacture and not as it occurs in the finished product.

18.43 Product prepared with meat byproducts to the exclusion of meat cannot be regarded as sausage.

The proportion of a condimental substance which may be added to sausage to augment its palatability is dependent on many variable factors. Substances having a strong pungency, aroma or appetizing quality should be in lesser proportion than substances having those qualities in lower value. On the other hand, condiments, especially those highly colored, should not be added beyond their usefulness as such. For instance, paprika has a low pungency, so a product to which it is added may be considerably altered in color before the condimental effect is apparent. In such a case, its coloring properties must be taken into consideration along with its seasoning value to determine the proportion that may be used in any given product. A larger amount of the condiment may be used however, if it is considered a customary ingredient of a specific product.

18.45 Equipment used in the preparation of sausage containing cereal or other permitted materials of similar kind shall be made acceptably clean before it is used to

prepare product not containing such additions.

18.46 Cereal is not a permitted ingredient of thuringer or corned beef hash.

18.47 Meat byproducts, cereal, and dried skim milk

are not permitted in mettwurst.

18.48 It is important to differentiate between the basis on which water may be added to sausage which is not cooked and that which is cooked. Sausage which is not cooked may contain up to 3 percent of added water, based on the total ingredients used in the preparation. The added water is not calculated on the finished product but

on the percentage of materials going into its manufacture. On the other hand, cooked sausage may contain up to 10 percent of added water, based on the weight of the finished product.

18.49 Only clear solutions free from insoluble suspended material or other contamination should be injected into meat for the purpose of curing.

18.50 Temperaturing devices, including thermocouples and various types of thermometers, are frequently available at official establishments for taking temperatures of product during processing. Inspectors may make use of any such temperaturing devices in their inspection work, providing they have been checked adequately against an official thermometer to insure accuracy and dependability. When distant reading devices such as thermocouples are used for temperaturing product, the sensitive element must be placed in the coldest part of the product just as is

presently done with thermometers.

18.51 The regulations provide for the addition to products of nitrates of sodium or of potassium as well as nitrites of sodium or potassium. The desirable action of the nitrates on or in products is contingent upon their conversion to active form as nitrites. Therefore, the addition of nitrates is limited to that amount which under normal conditions will not by conversion of the nitrates into nitrites result in the presence of nitrite in excess of the amount permitted in the regulations. The addition of excessive amounts of nitrates serves no useful purpose and is not permitted. The laboratory is in a position to determine the acceptability of the many varied mixtures containing nitrates, nitrites, or combinations of these, which are compounded for use in official establishments. The laboratory can also furnish information to the inspector regarding the amount of such mixtures that may be used.

18.52 Monosodium glutamate and hydrolyzed plant protein may be regarded as expected ingredients of sausage, meat loaf, luncheon meat, and similar meat food products and may be used in these products. These materials have long been used in loaves, soups, stews, hash, bouillon cubes, fluid extract of beef, imitation sausage, and other products. When used in meat food products, the labels for such products shall include the name of the added ingredient in the list of ingredients in the order of

its percentage and by its common or usual name, such as monosodium glutamate or hydrolyzed plant protein.

There is no objection to the inclusion of either monosodium glutamate or hydrolyzed plant protein in products such as hamburger, chopped beef, cubed steak, and steak prepared from meat which has been molded after comminuting processes such as grinding, chipping, thin slicing, and the like. Labels for product such as hamburger, which usually contain a list of ingredients, may reflect the addition of monosodium glutamate or hydrolyzed plant protein merely by including the added ingredient in the list of ingredients in order of its percentage. For example, Hamburger, Ingredients: chopped beef, beef fat, monosodium glutamate (or hydrolyzed plant protein). Labels for articles such as chopped beef, cubed steaks, or the comminuted type of steaks, which do not contain an ingredient statement, should indicate the use of the added ingredients by a qualifying statement such as "Monosodium Glutamate Added" or "Hydrolyzed Plant Protein Added." The qualifying statement must be contiguous to the name of the product and sufficiently prominent to assure its being read as a part of the name.

18.54 The use of monosodium glutamate or hydrolyzed plant protein does not in any way alter the amount of water that may be used in the preparation of luncheon meat, meat loaf, and fresh sausage, nor in the amount of water which may be present in cooked and smoked sausage. When samples of such meat food products are sent to the laboratory for analysis, information shall be furnished by the inspector on Form M. I. 422 concerning the amount of monosodium glutamate or hydrolyzed plant protein used for each 100 pounds of finished product. For each ounce of monosodium glutamate or hydrolyzed plant protein used per 100 pounds of finished product, one-sixteenth of 1 percent will be deducted from the total protein before computing the amount of added water in the product.

18.55 The labels for meat food products containing monosodium glutamate or hydrolyzed plant protein should not show the words "artificially flavored" contiguous to the name of products.

the name of product.

18.56 Monosodium glutamate or hydrolyzed plant protein may be added to the pumping pickle, cover pickle, or dry-cure mixture for cured meats. When used in such

cured meats as hams, bacon, pork shoulder picnics, cured beef, and tongues, no change will be required in the labeling. When samples of cured meats are sent to the laboratory for analysis, information shall be furnished by the inspector on Form M. I. 422 concerning the amount of monosodium glutamate or hydrolyzed plant protein used for each 100 pounds of finished product.

18.57 Acidification with vinegar, lactic acid, or citric acid of approved dye solutions for application to casings has been permitted.

18.58 Artificial casings impregnated with soluble approved dyes may be used in official establishments for the small varieties of sausages under the provisions of paragraph 18.7 (m) of the meat inspection regulations. The certification required for coal tar dyes under subparagraphs 18.7 (m) (2) shall be furnished with each lot of such dye-impregnated casings. "Blow-out" sausage, the sausage resulting from broken casings, and that which is stripped from the ends of the casings in order to effect the tie, may be reworked into subsequent lots of the same kind of sausage provided there is no perceptible coloring of the finished sausage as a result of the inclusion of this material.

18.59 The examination for color penetration in products should be made before the products leave the establishment. This control can easily operate without recourse to the laboratory. Corrective action, if indicated,

shall take place before the product is shipped.

18.60 Cured hams intended for canning may be shipped from one establishment to another if shipments are properly identified to the receiving inspector in charge. To do this, hams should be accompanied by a properly modified Form M. I. 408–1 which indicates that they are eligible for canning in accordance with the ap-

plicable regulation.

18.61 When it is considered necessary to send samples of ham to the laboratory for analysis to determine added substances the sample should be prepared as follows: A ham considered to be representative of the lot should be selected and the bone, skin and excess fat removed. The meat from the ham should be ground through a 1/16-inch plate, promptly mixed and ground again through the 1/16-inch plate, and again mixed. Approximately a 1-pound sample should be taken from the ground mixed

meat and placed immediately in the impervious bag which should be tightly closed to prevent loss of moisture. The preparation of the sample should be done quickly to keep to a minimum the loss of moisture during the handling. There would be no objection to the establishment taking a duplicate sample from the same mixture of ground ham for their laboratory.

- 18.62 (a) Establishments which receive Federal Meat Inspection Service are responsible for preparing *all* products in full compliance with applicable regulations. Whatever controls are necessary to obtain such compliance must be placed over the manufacturing processes. The following control measures have been found effective:
 - (1) Use a specific tested formula for each product and require strict adherence to the formula. If it is found necessary to deviate from a formula which is known to produce a product in compliance with the regulations, the establishment should expect to carefully work out such deviation with the inspector before regular production is started.

(2) Require accurate measurement and positive identification of all ingredients going into the manufactured

product.

(3) Use specific tested cooking and smoking practices which are known to produce a product in compliance with the regulations.

(4) Provide positive identification of product through the manufacturing processes and assure correct marking, labeling, or both, with approved materials.

(5) Frequently check the weight of the finished prod-

uct against total amount of ingredients used.

(6) Provide responsible supervision in the processing department to see that the controls are effective at all times.

- (b) The inspector has the responsibility of determining that all products prepared under his supervision comply with applicable regulations. To accomplish this effectively he must:
- (1) Have a thorough knowledge of the formulas and manufacturing processes used in preparing each product. To obtain this information it is expected that the inspector will observe the formulation of the product and manufacturing processes sufficiently to become thoroughly familiar with the practices used by the establishment.

- (2) Require such controls by the establishment as will result in all product manufactured being in compliance with applicable regulations concerning composition and correct marking and labeling.
- (3) Be certain that all product within the area of assignment is prepared with appropriate formulas and by methods which will result in compliance with the regulations.

(4) Know that all ingredients used in the preparation

of products are wholesome and acceptable.

(5) Permit the distribution of product which is known to be in compliance with the regulations and retain any product which is not. This action must be based on actual knowledge of the preparation of the product. Samples of such products shall, of course, be taken for laboratory analysis, if such analysis is deemed necessary.

(6) Require changes in formula when necessary, to

yield a product in compliance with the regulations.

(7) Collect such samples for laboratory analysis as are necessary to determine whether changes in manufacturing practices are needed to assure compliance with the regulations. All previous instructions and general understandings regarding the obtaining of a certain number of samples of violations before retaining a product are no longer effective.

(c) The supervisor has the usual responsibility to determine that the inspector working under his supervision performs effectively in the area of his assignment. To

accomplish this the supervisor should:

(1) Understand thoroughly the controls used by the management of the establishment to assure that all product manufactured is in compliance with the regulations.

(2) Understand thoroughly the inspection supervision given to the manufacturing processes by the

inspector.

(3) Collect check samples for laboratory analysis at irregular intervals to determine the effectiveness of the control program used by the establishment and the

supervision given by the inspector.

18.63 (a) Laboratories are maintained by the Meat Inspection Branch for supplying to the inspector information which he needs to be sure that all products under his supervision are prepared according to the regulations

The meat inspection regulations place full responsibility on the inspector to know that all product prepared is sound, wholesome, free from adulteration, and truthfully labeled at the time it leaves his jurisdiction.

(b) The inspector must be continually alert to detect substances unsuitable for inclusion in food such as those contaminated by rodents, insects, molds, dirt, and the like. The detection of such contamination often does not require the help of a laboratory examination. Materials such as seasonings, spices, cereals, and the like, have sometimes been found infested with insects in various stages of their life cycle when received at official establishments. In other instances, infestation has been found after the material had been held in storage in the establishment and could occur when fresh supplies are placed in bins or containers which are infested. At some stages (adult, larval and pupal) the insects are very small and could be easily overlooked. While most infestations can be detected by giving these materials a very careful examination before use, inspectors should frequently send samples to the laboratory where a more thorough examination can be made to determine acceptability.

Since some foreign matter can not be detected by visual inspection, samples of flour, spice flavorings, curing materials, dried skim milk, tomato puree, and the like should

be sent to the laboratory for examination.

(c) Part 17 of the meat inspection regulations gives the minimum requirements for a number of prepared products, so that the inspector can control the preparation of every batch of product. The regulations also specify the fat content of hamburger and fresh sausage and the gain permitted in hams for canning. The laboratory may be used for checks on such products, but the primary control is vested in the inspector in the establishment.

(d) When not more than the permitted amounts of curing materials are added to product, there should be few violations for excess nitrite. Sufficient checks of finished product should be made, however, to know whether the conversion of nitrate to nitrite has been greater than

normally expected.

(e) The fabricated product in each container should be identified to show all of the ingredients used in its preparation, listed in the order of their percentages. This identification should also be applied to containers of single

product not readily distinguishable. The tag or label used for identification should accompany the product through all stages of preparation from the time of chopping until the product is finally marked or labeled.

- (f) The inspector should not be concerned with the ability of a particular laboratory to handle necessary samples. Any adjustments in this respect will be made by the Head of the Chemical Control Section.
- (g) Samples may be collected any day of the week. Care should be taken to have samples of perishable products arrive at the laboratory in good condition. Thorough prechilling and control of the time of mailing will help prevent spoilage. Obviously, the collection of samples should not follow a definite schedule.
- 18.64 (a) Since all product should be in compliance with the meat inspection regulations when it leaves an official establishment, it follows that the inspector will retain product that does not comply with the regulations. In case of a difference of opinion between the management and the inspector on a question such as moisture content of smoked sausage or the addition of excess cereal or dried skim milk, samples of the retained product may, of

course, be submitted for analysis.

(b) It is important that samples taken for laboratory analysis be truly representative of the entire lot. The sample should be properly identified from the time it is taken until it reaches the laboratory. The Form M. I. 422 which accompanies the sample must be fully explanatory and contain information including the name of the product as it will be labeled, the list of ingredients in the order of their percentages at the start of preparation and the establishment from which the product originated. In most cases the sample should be taken from finished product, although investigational samples may be collected at any point in the operation. In the case of proprietary mixtures, a list of the ingredients as they appear on the shipping containers, the name and address of the manufacturer, and the purpose for which the material is intended should be noted on the laboratory form. In the case of dry mixtures, the smaller size plastic film bag (approximately 3 by 6 inches flat) should be almost completely filled with the material being sampled. Liquid materials should be submitted in the conventional 4 oz. sample bottle. If a shipment consists of more than 1 bag, barrel, or other

container, a proportionate number of samples should be taken at random throughout the lot. Any article received in an establishment and not identified by name and ingredient statement should be withheld from use until satisfactory identification is made.

(c) When sampling cereals, spices, and similar materials, the inspector upon opening the package should remove and examine a sufficient portion of the contents to ascertain whether the article is uniform throughout and to make sure that the sample represents the lot. Unfit materials should be rejected. Laboratory analysis of articles known to be unacceptable usually serves no useful purpose.

(d) Plastic bags furnished by the Meat Inspection Laboratories should be used in lieu of metal cans as containers

of meat and meat food product samples.

Approximately one pound of product should be placed in the plastic bag. Sausage and meat food products of the larger types will not need to be cut in small pieces. No paper or other absorbent material should be placed in the plastic bag with the sample. The top of the bag should be closed by twisting it, applying several loops of a rubber band and folding the twisted end over and applying one or two more loops of the rubber band. The air should be excluded from the package as much as possible, however, this closure should be applied so as to leave some space in the bag around the sample. This will permit some expansion in case decomposition and gas formation takes place during the shipment. The closed plastic bag containing the sample should be placed directly in the usual mailing carton. Three or four samples may be placed in the carton.

(e) All procedures in sampling should be so carried out as to provide the laboratory with as representative a sample as is possible under practical operating conditions. Since there is no practical method of sampling which can be considered entirely free from the potential of error, the inspector must evaluate the report he receives from the laboratory with full recognition of this possibility of error. There is bound to be a range in moisture content through a production of a batch of cooked sausage and instances where dried skim milk or cereal has not been uniformly distributed through the product have occurred. It is not probable that any one sampling by an inspector

of a batch of product will truly represent the entire production of that particular kind of sausage. The inspector, therefore, must make allowances for such probability. Naturally, a laboratory report indicating a sample of cooked sausage to contain an amount of moisture, cereal or dried skim milk considerably in excess of the regulations limitation should be interpreted as a clear indication that the plant's production methods are faulty and immediate correction should be required. By contrast with this, when sample reports show the presence of excessive added moisture, cereal or dried skim milk within narrow limits, the inspector may consider it necessary to obtain additional sample analyses of the sausage before he decides whether or not the methods used by the establishment are productive of cooked sausage that conforms with the regulations.

- 18.65 (a) Form MI 422 is designed for reporting one sample only. The establishment number and sample number should be shown in the upper right hand corner of the form in the appropriate space. The establishment number should be used in connection with each sample number, for example, the first sample number for establishment 38 would be 38-1, the second 38-2, and so forth. Sample numbers should begin anew the first of each fiscal year.
- (b) Laboratory sample forms shall be prepared and distributed as follows: Five copies of Form MI 422 shall be prepared by the inspector at the establishment for each sample to be forwarded to the laboratory. The forms may be hand-written if a typewriter is not available. The original and first and second carbon copies shall be placed on top of the samples in the cardboard container without being folded. Enclosing these copies in a used envelope or one not bearing the frank will result in their reaching the laboratory in good condition. The fourth copy should be placed around the bag or bottle containing the sample and folded so that the description of the product will be on the outside. A rubber band or string should hold the form around the sample container. The fifth copy is retained by the inspector until the laboratory report is received.
- (c) When the laboratory findings are completed they shall be reported on the three copies of Form MI 422 received with the sample. The original shall be returned to the inspector in charge, the first copy forwarded to the

Area Director in Washington, D.C., and the second copy retained by the laboratory for an official record.

(d) When a sample does not comply with the regulations, the inspector at the establishment shall make his corrective action report on the fifth copy in accordance with the instructions on the reverse side of the form. This report shall be forwarded to the inspector in charge for his comments and signature and then sent to the area director. Be sure that the form sent to the area director is legible and shows the nature of the violation.

18.66 When a sample is sent to the Washington Meat Inspection Laboratory for special purpose, a notation must be made on the laboratory form to that effect, or the form should bear reference to a letter or correspondence. If no notation appears on the form to indicate special handling, the sample may be discarded or given the usual analysis for the class of product, especially if it arrives ahead of any correspondence on the subject. It is important that all copies of the form be clear and legible.

18.67 Samples of meat and meat food products prepared in official establishments are forwarded to the laboratory for examination when further information is needed by the inspector to determine whether product is prepared in compliance with the regulations. All sample forms for product shall include the inspector's written questions concerning the product represented by the sample, for example, "What is the added moisture content?", "What is the dried skim milk content?", "What is the cereal and added moisture content?", "What is the fat content?", etc. Unless a sample is accompanied by a form asking for specific information, the sample will be discarded by the laboratory. The laboratory will return the form to the inspector with a notation to that effect.

18.68 New cartons for forwarding samples will be stocked at the following stations: Chicago, Illinois; Kansas City, Kansas; New York, New York; Omaha, Nebraska; St. Louis, Missouri; San Francisco, California; and Washington, D.C. The fiber cartons should be used exclusively for sending samples to the laboratory and the use of any screw-top sample containers on hand should be discontinued. Where less than three samples are placed in the carton, the additional space should be filled with paper or other light waste material. Two addressed franks, one for forwarding samples to the proper lab-

oratory from which they were forwarded shall be prepared by the inspector at the establishment. The franks should be placed on the carton in such a way that only the outgoing frank will be visible when the carton is tied and ready for mailing. In this way an adequate supply of sample containers and cartons should be available at the establishment whenever needed.

18.69 Following is a list of area directors and the sta-

tions under their supervision.

Dr. R. K. SOMERS

Area 1

El Paso, Tex. Los Angeles, Calif. Phoenix, Ariz. Portland, Oreg. San Diego, Calif. San Francisco, Calif. Seattle, Wash.

Dr. D. W. GLASCOCK Area 2

Baker, Oreg.
Billings, Mont.
Butte, Mont.
Clarkston, Wash.
Denver, Colo.
Grand Forks, N. Dak.
Great Falls, Mont.
Huron, S. Dak.
Nampa, Idaho
Omaha, Nebr.
Pueblo, Colo.
Rapid City, S. Dak.
Salt Lake City, Utah
Scottsbluff, Nebr.
Sioux Falls, S. Dak.
Spokane, Wash.
Watertown, S. Dak.
West Fargo, N. Dak.

Dr. J. S. STEIN Area 3

Austin, Minn.
Cedar Rapids, Iowa
Davenport, Iowa
Des Moines, Iowa
Dubuque, Iowa
Duluth, Minn.
Eau Claire, Wis.
Edgar, Wis.
Fort Dodge, Iowa
Mason City, Iowa
Ottumwa, Iowa

Sioux City, Iowa South St. Paul, Minn. Storm Lake, Iowa Waterloo, Iowa Winona, Minn.

Dr. J. R. SCOTT Area 4

Archbold, Ohio Chicago, Ill. Detroit, Mich. Fremont, Mich. Green Bay, Wis. Madison, Wis. Menominee, Mich. Milwaukee, Wis.

Dr. E. A. MURPHY Area 5

Allentown, Pa. Brier Hill, N.Y. Buffalo, N.Y. Bushnell, Ill. Cincinnati, Ohio Cleveland, Ohio Columbus, Ohio Cortland, N.Y. Danville, Ill. Dayton, Ohio Erie, Pa. Evansville, Ind. Fort Branch, Ind. Frankfort, Ind. Gouverneur, N.Y. Hallstead, Pa. Harrisburg, Pa. Indianapolis, Ind. Louisville, Ky. Lyndonville, Vt. Muncie, Ind. Peoria, Ill. Piqua, Ohio Pittsburgh, Pa. Potsdam, N.Y.

Reading, Pa.
Rochester, N.Y.
St. Albans, Vt.
Scranton, Pa.
Terre Haute, Ind.
Wheeling, W. Va.

Dr. E. N. TIERNEY Area 6

Albany, N.Y.
Boston, Mass.
Hartford, Conn.
Kingston, N.Y.
Manchester, N. H.
Newark, N. J.
New Haven, Conn.
New York, N.Y.
Philadelphia, Pa.
Portland, Maine
Springfield, Mass.
Worcester, Mass.

Dr. W. R. KIDWELL Area 7

Amarillo, Tex.
Arkansas City, Kans.
Fort Worth, Tex.
Houston, Tex.
Jackson, Miss.
Joplin, Mo.
Kansas City, Kans.
Lake Charles, La.
Memphis, Tenn.
Oklahoma City, Okla.
Opelousas, La.
Pittsburg, Kans.
Shreveport, La.
St. Louis, Mo.

San Antonio, Tex. South St. Joseph, Mo. Union City, Tenn. Wichita, Kans.

> Dr. H. H. PAS Area 8

Atlanta, Ga. Augusta, Ga. Baltimore, Md. Bartow, Fla. Birmingham, Ala. Bristol, Va. Charleston, S. C. Charlotte, N.C. Chattanooga, Tenn. Clinton, N.C. Cumberland, Md. Dothan, Ala. Frederick, Md. Hialeah, Fla. Key West, Fla. Kinston, N.C. Knoxville, Tenn. Maxton, N.C. Miami, Fla. Montgomery, Ala. Moultrie, Ga. Nashville, Tenn. New Orleans, La. Norfolk, Va. Ocala, Fla. Orangeburg, S.C. Pensacola, Fla. Richmond, Va. Salem, Va. San Juan, P.R. Tampa, Fla. Washington, D.C.

18.70 Cured boneless pork loins and sizable pieces thereof which have been treated for the destruction of possible live trichinae may be shipped provided they bear the marks of inspection. It is not necessary that they then be forwarded in sealed containers or sealed vehicles.

18.71 Official establishments shall provide adequate facilities for the control of boneless pork loins during the curing process or adopt operating practices which will eliminate any possibility that untreated cured boneless pork loins may be shipped.

18.72 Thermocouples connected to recording equipment may be used for taking temperature of products that are heated to destroy possible trichinae provided the in-

spector has assured himself by checking the thermocouples with an official thermometer that the temperatures recorded are accurate. Placing thermocouples in product must be under the supervision of an inspector and an adequate number of thermocouples must be used to determine that all product in the smokehouse reaches the necessary temperature. In permitting the use of this equipment the inspector must assure himself that there is no possible way of recording a temperature that was not obtained in the product being treated for trichinae.

Subparagraph 18.10 (c) (1) of the Meat Inspection Regulations requires that pork muscle tissue be heated to a temperature not lower than 137° F. The inspector must therefore know that all such product is adequately heated. When it is determined that a cold spot exists in a heating chamber, the establishment should take such action as may be necessary to eliminate it. Defects in the number or location of heating coils or air ducts in a smokehouse or lack of proper insulation of the heating compartment or unit are the usual causes for cold spots. Some difficulty also may result from uneven loading or distribution of the product in the heating compartment.

When taking the temperature of product, care must be exercised to obtain the lowest temperature in the product. Special attention should be given to the largest pieces of product or the innermost links of bunched sausage. In small varieties of sausage placed in direct contact with wooden smokesticks when the temperature of sausage is only slightly above 137° F., the temperature should also be taken of that part in direct contact with the wooden smokestick.

18.73 A cured, boned, and rolled whole ham, unsmoked, either tied or in a casing, is commonly termed "Scotch Style Ham" in certain localities. As Scotch Style Hams are customarily well cooked in the home or elsewhere before being served, they need not be treated for the destruction of trichinae.

18.74 The Armed Forces desire at times to purchase smoked hams smoked at temperatures sufficiently high to impart a partially cooked appearance to the meat. We have acceded to its request not to require such product to be treated to destroy possible live trichinae as contemplated by Section 18.10 of the meat inspection regulations when such ham is to be consigned to the Armed Forces.

However, the regulations remain in full effect as they apply to smoked hams that are not consigned to the Armed Forces. Smoked hams prepared for delivery to the Armed forces must not be diverted into channels of trade until they have been treated by one of the methods prescribed in the regulations for destruction of trichinae.

18.75 When water is used as a solvent for the nitrate ingredient and so added to gain a more even distribution of the curing agent, or when wine is added principally as a flavoring to certain kinds of sausage processed under limitations prescribed in subdivision 18.10 (c) (3) (i) of the regulations, it will be permissible to add not more than approximately one-fourth of 1 percent of water or 1 percent of wine to sausage of the type that is treated for destruction of possible live trichinae by any one of the methods prescribed in subdivision 18.10 (c) (3) (i) of the meat inspection regulations. When used, such ingredients should be shown in the statement of ingredients in the order of their percentage content.

18.76 There should be a close synchronization of canfilling lines and heat processing. It is not sound practice to overproduce at the filling lines beyond normal retort capacity. This may cause a delay in heat processing or a tendency to hurry some phases of the heating operations. The type and temperature of the canned product as well as the size of the can are some of the factors which must be taken into consideration in the determination of how promptly the product must be heat processed after closing. Products which are cold-packed should be maintained at a low temperature until heat processing begins.

18.77 Ample but not excessive head space should be allowed in hermetically sealed containers. Deceptive filling of containers cannot be condoned. Overfilling cans should

be avoided.

18.78 It is advisable to make periodic checks to determine that cold spots do not exist in the heat processing equipment. Exhaust boxes should receive attention as to cleanliness and adequate heating apparatus. There should be free circulation of heat throughout.

18.79 It is not necessary to exercise close supervision over the internal temperature of sausage prior to canning when it is known that such product will be subsequently

canned with adequate heating.

18.80 Canned product should be handled, stored, and

shipped so as to avoid damage from extremes of heat or cold, rusting and denting.

18.81 The repacking and reprocessing of contents of defective cans which have been handled as outlined in paragraph 18.11 (d) of the Meat Inspection Regulations shall include processing by heat fully equivalent to the original processing.

18.82 Those canned products which are processed without steam pressure cooking by permission of the Chief of the Meat Inspection Branch and labeled with the perishable warning statement shall be prepared in accordance with the method of preparation including ingredients and internal temperature obtained during processing that is shown on approved labeling material

for this type of product.

18.83 The minimum number of cans or containers to be incubated as samples of a lot of processed canned product shall be at least one container from each basket in a retort. Incubation of test samples shall be accomplished in an acceptable room or compartment held under Official lock. Incubation of a certain sample may be discontinued before the full 10-day period has elapsed if it becomes apparent that the product does not possess the necessary stability to assure its keeping under usual conditions of handling, storage, and transportation. Corrective action regarding the lot should commence at once. Sample incubation is not always positive proof of the character or stability of the entire lot, and it should be used in addition to but not in lieu of constant vigilance and supervision of all processing procedures. There should be no hesitancy to increase the number of cans selected for incubation if there is cause for such action. Careful inspection of product being incubated should be made at least daily.

18.84 If there is any question as to whether or not an article prepared with product is classed as meat food product, full information should be submitted to the Branch giving the method of preparation of the article, the ingredients used and their proportions, the name of the product, and a sample thereof if it can be obtained. Further information should be given relative to whether the article is intended for interstate or foreign commerce.

18.85 Bread sandwiches prepared in the conventional manner with a filler of product have usually not been considered a meat food product. However, it is desirable to

clear the classification of such articles through the Washington office when they are observed.

- 18.86. Powdered, semisolid, viscous, or fluid soup bases, gravy mixes, dehydrated soup mixes, bouillon cubes, and the like, containing meat extract or animal fats or both as the only meat or meat byproduct ingredient, will not be regarded as meat food products. When such articles are prepared for sale in interstate or foreign commerce or are offered for importation into the United States or its territories, they are subject to the Food, Drug, and Cosmetic Act administered by the Food and Drug Administration of the Department of Health, Education, and Welfare.
- 18.87 Ingredient mixtures containing cereal or soya flour are acceptable for use in products where a maximum percentage of cereal or soya flour is specified in the regulations only when the mixture is labeled to show the percent of cereal or soya flour which it contains. Ingredient mixtures of dried skim milk or dried whey with other substances are not acceptable for use.
- 18.88 Certain seasoning preparations contain various amounts of dried corn syrup, dextrose, and the like. In the enforcement of the requirement that not more than 2% of dried corn syrup, corn syrup solids or corn syrup be used in meat food products such as sausage, hamburger, meat loaf, luncheon meat, chopped ham, pressed ham, and the like, inspectors should take into consideration the amount of such sugar added to product by the use of seasoning preparations. Inspectors should make use of the laboratory for determining the amount of sugar other than sucrose or dextrose in the seasoning preparation when this information is not shown on the label.
- 18.89 When papain or other approved proteolytic enzymes in combination with or without seasoning materials are used on steaks and other meat cuts which are frozen or cooked within the establishment, the product shall be handled in a manner which will control the action of the enzyme material. The solution shall not be used in a manner that will result in adulteration of product and the presence of the enzyme material as well as other ingredients which are added must be shown in the ingredient statement.

PART 20-REPORTS

PART 21—APPEALS

21.1 When an inspector's decision is questioned, a report is made by letter rather than on the obsolete form "Report of Inspector Whose Decision is Questioned."

PART 22—COOPERATION WITH LOCAL AUTHORITIES

22.1 Information furnished by meat inspection stations when diseased conditions are found among animals at slaughtering establishments, and giving point of origin, has been of great value in assisting Federal and State officials in controlling communicable diseases of livestock. This has been especially true with such diseases as tuberculosis, hog cholera, swine erysipelas, anthrax, vesicular diseases, cysticercosis, and various parasitic infestations. Several instances have come to our attention showing the value of this cooperation. However, we are impressed by the fact that some meat inspection stations submit many more reports of this character than do others. It is possible that this difference is occasioned by a greater ease of determining the origin of diseased animals in some stations than in others.

Because of the importance of this work, it is urged that all inspectors in charge give close attention to it and forward the necessary reports whenever it is reasonably practicable to determine the origin of animals affected with communicable diseases encountered at official es-

tablishments.

Owners and operators of official establishments will recognize that aid given in the identification of lots of diseased animals will serve to further reduce the incidence of the disease among the livestock population in the areas served by such establishments, a reduction which will shortly be reflected in a direct return to both the producer and the packer through the avoidance of loss by condemnation of diseased animals or their carcasses.

22.2 The reports made by inspectors will be on Form ADE 2-11C except those reporting tuberculosis. The original should be forwarded to the Branch at Washington, one copy to the Veterinarian in charge of the State of origin of the animals covered by the report, and a copy to

the appropriate State livestock sanitary official of the State of origin. The form forwarded to the Branch should be noted to show that the required distribution has been made of other copies of the report.

22.3 Form ADE 6-35 "non-reactors showing tuberculosis lesions" should be used by veterinary meat inspectors for reporting lesions of tuberculosis found during slaughter of all non-reacting bovine animals and whenever extensive tuberculosis infection in lots of swine are encountered. It is important that all animals found to have tuberculosis lesions as well as those which show lesions suspicious of tuberculosis should be reported even though all of the information about the origin of the animal can not be obtained.

Each form completed should be identified in the upper right-hand corner by the establishment number where the animal was slaughtered and a case number starting with number 1 on July 1 of each year and running consecutively at each establishment. The form should be distributed in accordance with instructions appearing on it. Inspectors should furnish all information available about the identity of the animal in the space provided on the form.

22.4 In some instances, the identity of cattle is established at the slaughtering plant through the medium of ear tags, stockyards sales tags, and similar identifying devices. In many instances, cattle from Western States can be identified more positively by means of hide brands. These brands are registered with the livestock authorities of the States and are identified as the cattle move through the sales barns, stockyards, and the like. Whenever possible, these brand identifications are to be shown along with ear tag numbers and other identifying features on Forms ADE 2–11C and ADE 6–35 reports. Brand inspectors are located at many livestock centers. It is suggested that they be asked to assist in the brand identification of diseased animals.

22.5 The bovine tuberculosis eradication campaign has been so successful that the incidence of this disease throughout the entire country has been reduced to negligible proportions. In order to carry through with effective followup control measures, it is necessary to make use of a system that will locate the remaining few centers of infection. When these are located, disease control officials

can concentrate their efforts in the areas where correction is needed. This effects a maximum of results with a minimum expenditure of time and money. The key point in this system is at the slaughtering plant where animals affected with tuberculosis can be identified and thus lead the investigators to the infected premises.

- 22.6 If cattle affected with mucosal disease, virus diarrhea or rhinotracheitis are found during ante mortem and post mortem inspection, a report by telephone should be made to the veterinarian in charge of the ADE Branch of the state of origin. The telephone report should be confirmed by a written report, using Form ADE 2–11C for this purpose, with copies to the State Livestock Sanitary Official and the Meat Inspection Branch at Washington.
- 22.7 (a) Food articles are examined for various Government agencies for the purpose of insuring delivery of only such articles as conform to the specifications under which they are purchased. This service is performed at the special request of such agencies. Examination of food articles for specification, or contract compliance, for condition or for the two combined may be made upon request of the contractor or the Government agency provided the inspector is furnished with a copy of the contract letter of award or other information clearly indicating the specifications under which the article is purchased, and further provided that the Government agency appears on the following list of those with which we have memorandums of agreement to furnish the service on a reimbursable basis:

Department of Agriculture:

Fruit and Vegetable Division, Agricultural Marketing Service (Drawing official samples of processed fruits and vegetables).

Meat Grading Branch, Livestock Division, Agricul-

tural Marketing Service.

Poultry Inspection Branch, Poultry Division, Agricultural Marketing Service. (Inspection and certification of poultry products in federally inspected establishments).

Forest Service.

Department of Army:

Corps of Engineers, U. S. Army (Rivers and Harbors).

Department of Commerce:

Civil Aeronautics Administration.

Inland Waterways Corporation.

Maritime Administration.

Department of Health, Education and Welfare: Public Health Service.

Independent Offices and Establishments:

National Zoological Park.

Panama Railroad Company.

Tennessee Valley Authority.

Veterans' Administration.

Department of the Interior:

Alaska Railroad.

Alaska Road Commission.

Fish and Wildlife Service.

Department of Justice:

Bureau of Prisons.

Immigration and Naturalization Service.

Department of Navy:

U. S. Marine Corps.

U.S. Navy.

Department of the Treasury:

U. S. Coast Guard.

(b) The Veterans' Administration and Public Health Service have specifications of their own; other Government agencies usually purchase food articles under the

Federal specifications.

- 22.8 (a) Examination of meat to determine whether it meets specifications shall consist in determining the kind, quality, and condition of cuts of meat and the supervision of the handling of meat food products throughout the various processes of preparation until packed and marked for delivery. Supervision shall also cover the preparation of curing agents, the kind and length of cure, and smoking at specified temperatures, as well as cutting, chopping, spicing, wrapping, packing, labeling, and affixing the special mark of the agency for which the product is intended.
- (b) Each step in the preparation of products such as sausage, hams, bacon, etc., shall be closely supervised to see that the product conforms to the specifications. However, smoked hams and bacon of the quality required by specifications which have been fully cured and smoked may be accepted without special supervision of each step

in the preparation of a particular purchase, provided inspectors have actual knowledge that the hams and bacon have been cured and smoked as required by the specifications.

(c) The examination of meat, meat food products and fresh sea food for specification compliance for Federal Government agencies whether in federally inspected establishments or elsewhere will be done by personnel of the Meat Inspection Branch. If fresh or cured meat, carcasses, or cuts are involved and grade is a factor, it will be required that the vendor offer meat that has been federally graded. (Not applicable to purchases on Army contracts as specified instructions on the subject govern.)

Where the Federal Government agency is one with which we have a memorandum of understanding (agencies appearing on the published list), the charge will be made against the Federal agency, with the exception that purchases for the Veterans' Administration, Public Health Service, Maritime Administration, Fish and Wildlife Service and the U. S. Coast Guard will be made against the vendor. When specification examination is made of meat or meat food products for Federal agencies with which we do not have a memorandum of understanding the charge will be made against the vendor. This will include purchases made by the General Services Administration for other Government agencies.

The charge for specification compliance work for fresh sea food and large contracts of non-perishable subsistence items (such as canned corn beef) on Veterans' Administration contracts will be made against the Veterans' Ad-

ministration.

(d) Meat and meat food products for the Navy and Marine Corps may be examined for compliance with specifications and marked with the special brands of those agencies upon request of official establishments, even though the official establishments are not in possession of contracts.

(e) Meat and meat food products which have been examined and found to conform to specifications shall be marked with the appropriate brand to indicate specification compliance. Special brands for Veterans' Administration, U. S. Navy, U. S. Marine Corps, and U. S. Coast Guard may be requisitioned from the Washington office.

The regular USDA accepted brand will be used for

Public Health Service purchases. Special brands for other Government agencies may be used if they are available at the local stations, otherwise, the USDA accepted brand will be used.

- (f) Contractors' bills for meat and meat food products delivered to the Navy on Navy contract shall be marked with a rubber stamp bearing the following statement: "The meat or product described herein has been inspected and found to comply with the specifications of the U. S. Navy," followed by the words "Inspected"—"M. I. Service". Stamps for this purpose are available upon requisition.
- 22.9 (a) Form MI-416 will be used to report specification examination work. In most cases the Form MI-416 will be prepared with the MI-416-1 (IBM card) as the duplicate. Form MI-416 will be retained for station file and the Form MI-416-1 forwarded to M. I. Records in Washington.
- (b) All expenses in connection with the specification examination of food articles will be charged either to the agency or to the vendor who requested the service as outlined in the other paragraphs. The charges for this service should be made on the basis of a minimum charge of one hour and multiples of fifteen minutes thereafter in any one day. If the charge is to be made against the vendor and the establishment has orders for several facilities of the same Government agency, or orders for several Government agencies with the possibility that inspection was performed by more than one inspector in the same establishment for that day and the total time spent by the inspectors amounted to one hour and thirty minutes, then the charges against the establishment would be one hour and thirty minutes. On the other hand, if there was only one inspection during the day the minimum charge against the vendor would be for one hour.

Charges for the service will be made against the vendor or Government agency on Form BFD-96. If service on overtime basis is involved and there is reimbursable meat inspection overtime against the same vendor, then there should be two Forms BFD-96, one showing the charge for the specification examination service and the other the reimbursable overtime on account of the meat inspection work at the station. In other words, we do not want so-called meat inspection overtime on the same Form BFD-

96 as charges against the vendor under the Marketing Act of 1946 for specification examination of product. Service performed under conditions outlined here should be noted under "Remarks" on Form BFD-96 as "Service furnished under Agricultural Marketing Act, 1946". The Government agency for which the product is being prepared should also be noted.

- (c) When laboratory analysis is requested in connection with specification examination work of a reimbursable nature for any agency, facility or establishment, the laboratory shall include on the reporting form the hours of laboratory time. It is the responsibility of the inspector to see that his daily time slip reflects all charges of a reimbursable nature—examination and laboratory time (each separately) so that these charges can be properly entered on the BFD-96 billing form rendered the one requesting the service. The total laboratory time should be entered in the "Remarks" space on Form BFD-96. No reference to the hourly rate for either examination or laboratory time should be shown on any document prepared at the station level.
- (d) When the Veterans' Administration is to be billed the forms shall be issued in quintuplicate. (Four copies MI-416 and fifth copy MI 416-1). One copy (MI-416-1) shall be mailed to the M. I. Records, Washington; one copy mailed to the manager of the Veterans' Administration facility to which the food articles are destined, one copy furnished to the contractor, one copy retained by the inspector as his office record, and the original retained by the inspector in charge until the end of each billing period and then attached to the Form BFD-96 and forwarded to the Budget and Finance Branch, ARS, Washington. The amount of time spent in the examination of the product shall be indicated on the Form M. I. 416, recording separately the time spent on products passed as meeting the specifications and the time spent on the examination of products that are rejected. It is our understanding that the amount of time spent examining products that are rejected is billed against the vendor by the Veterans' Administration.
- (e) No reference to the rate per hour shall be made on the Form M. I. 416 for the Veterans' Administration or any other Government agency. The amount of time spent in the examination of the product shall be indicated on all

Forms M. I. 416, except where otherwise indicated.

The Meat Grading Branch, Livestock Division, Agricultural Marketing Service, of the Department makes acceptance examinations of various processed meat food products for non-Federal government procurement agencies. This is done in accordance with specifications that may include such provisions as a definite ingredient formula, prescribed curing processes, specified smoking schedule or other factor. When the product is prepared in a federally inspected establishment, the Meat Grading Service representative locally will ask for our constant supervision during certain portions of the processing. It is our understanding that most of the requests for constant supervision will cover only the formulation of the meat food product, with the other processing phases receiving the usual supervision from a Meat Inspection standpoint. We have agreed to do this work and will be reimbursed for our service.

It is expected that our personnel will maintain sufficient control of the identity of these products from the time they assume the responsibility for this specification compliance through all subsequent operations and until such time as the Grader is prepared to make the final acceptance, which consists of determination of finished product characteristics, packaging, sealing, stamping, etc.

When our cooperation is desired, the local Grading people will so inform our personnel, giving the establishment involved, furnish a copy of the applicable specifications and indicate the processing operations for which we are to be responsible. The method of dealing between the Grading Service and ourselves at the local level willbe left to the discretion of the inspector in charge, that is, he might deal with the main station supervisor of the Grading Service or he might have the Grader responsible for the final acceptance deal directly with our inspector in the establishment involved. Regardless of the method, our supervisory personnel should keep conversant of what is being done.

The Grader will notify the inspector in time so that the latter may be prepared to assume his part of the work. When our inspector turns the product over to the Meat Grader, he, at that time, will present to the Grader for his signature, four (4) signed copies of our MI-416 (in

pads) containing the following information:

- 1. Name of agency for which product is being processed.
 - 2. Name and item number of product being certified.

3. A specific statement covering the phases of pro-

cessing that are being certified.

4. Number of hours charged, designated as either basic or overtime or both, as the case may be. Time for laboratory examination should be shown separately. (Although the number of hours are shown, the hourly rate should not be put on the four forms. This time must be the same as the corresponding time on Form BFD-96.)

The completed forms should be distributed as follows: The original copy should be used to support the billing and attached to the Form BFD-96 that is sent to the Washington office. Two copies should be given to the Grader. The fourth copy is the station record. In addition, a fifth copy on MI 416-1 which need not bear the signature of the Grader should be sent to Meat Inspection

Records, Washington, D. C.

On the Form BFD-96 under "Remarks" should be a statement which will connect it up with the Form MI 416 in the event the two become separated. The statement should show the number of the establishment where the product was prepared and in addition some identifying notation such as "Pennsylvania State Contract". The BFD-96 should show that the billing is to be made against the Meat Grading Branch. Any hours spent on this work should be entered on line 7 of MI 418-3 "Personal Services Summary".

22.11 To facilitate examination at the point of delivery, the special Navy, Marine Corps, and Coast Guard brands, denoting compliance with specifications, should be applied to fresh meat enclosed in cloth coverings and to

containers of meat food products, as follows:

(a) On the heel of the bottom round on beef hind-quarters.

(b) On the cut known as the rib on beef forequarters.

(c) On the outside of the round about halfway up on veal sides, veal saddles, and veal legs.

(d) On the back, across the hips of lamb and mutton

carcasses.

(e) On the outside surface near the middle of the length of such cuts as beef briskets, beef chucks, beef

ribs, beef loins (full, short, or ends), beef rumps, veal racks, veal forequarters, veal chucks, lamb or mutton racks, and lamb shoulders.

- (f) On the shipping containers, on the end which bears the name of contents and net weight.
- The broker, commission agent, packer or other responsible person concerned with the importation has the responsibility to notify the inspector in charge when the Canadian cattle are received at an official establishment and to identify the cattle to the inspector concerned. After the imported cattle have been slaughtered, notification to that effect should be sent to the Animal Inspection and Quarantine Branch inspector in charge at the border point of entry on a form supplied for this purpose. IQ-33 "Animals Imported for Immediate Slaughter." It is not expected that this coverage will be extended to plants not operating under Federal meat inspection. It should be noted that a space is provided on Form IQ-33 for indicating tuberculosis lesions found in such animals. Tuberculosis lesions found in cattle from Canada should not be reported on Form ADE 6-35.
- 22.13 The Animal Disease Eradication Branch administers certain regulations which deal with the cleaning and disinfection of vehicles which have been used to transport reactors or other animals affected with contagious diseases. At those stations where the inspector in charge has been given responsibility for administering these regulations, this should be done in the usual manner. It is not contemplated that other meat inspection employees will take any action on the disinfection of such vehicles at other locations.
- 22.14 The Branch will furnish assistance whenever requested by the Fruit and Vegetable Division in drawing official samples of processed fruits and vegetables at locations where personnel of the Division are not regularly assigned but where meat inspectors are working. The field officials of Fruit and Vegetable Division will supply the necessary instructions at the time the request for drawing of samples is made.

A charge for the time should be made on Form BFD-96 in the regular manner showing under "Remarks" the type of service given and the name of the Branch of Fruit and Vegetable Division requesting sampling.

PART 23—BRIBERY, COUNTERFEITING, ETC.

PART 24—EXPORT STAMPS AND CERTIFICATES

24.1 It is necessary that a good adhesive suitable for the purpose intended be used to affix export stamps securely to containers. Some adhesives suitable on wooden boxes may not be satisfactory on metal containers. Also, the handling that the articles are to receive, such as freezing, will determine the kind of adhesive to use. It has been found desirable to apply a thin covering of adhesive over the export stamp as an added protection.

24.2 When U.S. inspected and passed product is processed in other than an official establishment, it loses its identity as such and is no longer considered inspected and passed product. It is therefore not eligible for export

certification as such.

24.3 Careful examination and inspection must be given to products for which export certificates are requested. The extent of reinspection of inspected and passed product depends on the type of product or container thereof and the size of the order. In some cases, sample inspection is sufficient while in others 100-percent inspection might be necessary. The inspector must make such inspections as will assure him of the facts upon which he makes the export certification.

24.4 The signature of the inspector in charge shall appear on the original of the export certificate in ink. Facsimile signature may be used on other copies of the certificate unless otherwise prescribed.

24.5 The certificate number shall be inserted on the quadruplicate form of the certificate in the space provided

for that purpose.

24.6 Except as indicated, the destination shall be shown on the export certificate. Obviously, the ultimate foreign destination is desired. Many times export certificates are received in the Records Section showing as a destination a city, usually a port city, in the United States. This may be because the exporter or his agent does not know or does not wish to divulge the ultimate destination of the shipment. However, a domestic city should not be used in lieu of a foreign destination.

There are occasions when the blank space on the face of certificates is insufficient for the necessary information. In such cases, it is satisfactory to carry over the information on the reverse side of the certificate and place a notation to that effect in the prescribed space.

- 24.8 It is not necessary to furnish more copies of official export meat inspection certificates than is provided for in the regulations. Exporters requesting additional copies may make photostats of the completed certificates furnished to them.
- 24.9 Inspectors in charge are authorized to comply with requests received from time to time to inspect and certify for export product previously inspected and passed and so marked which is located elsewhere than in an official establishment. This may be done whether the product is located within reasonable limits of the official station, substation, or at a place so situated geographically that the export certification would logically be handled by the station receiving the request. In the latter case, the availability of an inspector must necessarily be considered. For example, if the meat inspection work in the small stations is such as to require constant attention of the inspector or inspectors there assigned to a degree that the request cannot be complied with, then the person making the request shall be so informed and asked to submit his request to the inspector in charge of a larger station where an inspector would be available, either near the place where the product is located or to the Washington office. An inspector in charge may transmit such a request with his comments to the Washington office if he believes such action demands. The party requesting the service is to reimburse the meat inspection appropriation for the expenses of travel and subsistence that an inspector incurs while away from his official station, but no charge shall be made against the person or firm requesting the service for the time of the inspector. Also, the party requesting the service is to reimburse the meat inspection appropriation for inspection given during any overtime period. Information should be given to the Washington office on the current billing form. The employee shall claim reimbursement in the regular manner on Standard Form 1012.
- 24.10 Requests are received from time to time for certification of inedible material that is to be exported, such as fertilizer, dried blood, bone meal, and the like. The certification desired is usually a description of the method of processing and handling, the temperature to

which the product has been heated, and the length of time maintained, etc. Under the Meat Inspection Act the inedible products department is not inspected closely enough to warrant the issuance of such a certificate. However, there has been set up by the Animal Inspection and Quarantine Branch, ARS an identification and certification service for the purpose of certifying inedible material. The certification shows that the material has been processed in a manner to meet the requirements of the purchaser of the supplier or of others. When this material is prepared and/or handled in an establishment at which our inspection is maintained the AIQ Branch have asked us to act for them. This will be done by issuing the certification basing it upon such supervision as is necessary to obtain the essential factual information. For this purpose the regular inedible export certificate should not be used. It is not likely that a printed form of certificate will be furnished as the requirement will vary from country to country. Accordingly a letterhead type of certificate will probably be utilized. This should show that the certification is by the AIQ Branch with the inspector in charge acting for it. The meat inspection impression seal should not be used.

The Washington Staff of the AIQ Branch will deal directly with inspectors in charge about this problem and furnish instructions to carry out the functions.

Charges for the service will be billed against the AIQ Branch and will include the time needed to complete the transaction including the time of the inspector supervising the processing or preparation of product and time of any one making out and handling the certificates. A minimum charge of 1 hour will be used for each separate billing transaction, that is, each time a certificate is issued the minimum charge of 1 hour applies to the total time necessary to complete a specific certification. Periods of 15 minutes on separate days could be totaled to make the 1-hour minimum as long as the supervision was for a particular certification.

Inspector's time slips should reflect daily the time spent on the project, and on the Form BFD-96 under remarks should appear some statement that will connect the form with the work done and the certificate issued, for example,

"Blood Meal for Holland".

This will mean that eventually any certification requir-

ing something in addition to that appearing on the regular inedible export certificate will be handled by the AIQ Branch. There will be a period of time, however, during which we will continue to honor any commitments that have been made or that we may make in order not to disrupt commerce during the transitional period. For the time being, the regular inedible export certificate should be issued where no modification is required.

This type of certification may also be obtained for domestic shipments.

24.11 Assurance has been given that no meat or meat product from the carcasses of sheep or lambs which show any lesions of caseous lymphadenitis will be exported from this country to England, Wales, Scotland, and Northern Ireland. (See 24.4 (c) (6) of the regulations). No export certificate should be issued covering an exportation to the above countries for product from carcasses of sheep or lambs showing any lesions of caseous lymphadenitis, or such carcasses or meat therefrom from which a lymphatic gland has been excised, except a gland necessarily removed in preparing the meat.

24.12 The importation into Canada of any swine, uncooked pork, uncooked pork products, uncooked pork offal and garbage from the United States is prohibited. This also includes hog casings. The prohibition is due to the

existence in this country of vesicular exanthema.

The prohibition does not extend to boneless pork products heated to an internal temperature of at least 156° F. momentarily, or 145° F. for 15 minutes. Neither does the prohibition extend to pork products containing bone heated to an internal temperature of at least 156° F. for 15 minutes.

On the regular export meat inspection certificate covering the exportation to Canada of such cooked pork products, there should be placed on the reverse a statement certifying to the degree of heat obtained internally and to the length of time maintained. This statement should be followed by the signature and title of the one issuing the certificate.

24.13 To the regular export meat inspection certificate covering fresh, frozen, cured and/or smoked meat exported to Jamaica should be added by typewriter or otherwise the following statement: "The United States is

free from foot and mouth disease."

PART 25—TRANSPORTATION

25.1 This part deals with the interstate transportation of product derived from animals covered in the meat inspection laws and provides the methods whereby the

movement of such product can be regulated.

25.2 The movement of nonfederally inspected sound and wholesome meat derived from cattle, sheep, swine, or goats from one point in a State to another point in the same State which in its course passes through another State is not considered a violation of the Federal Meat Inspection Law.

25.3 Any person who makes proper certification may ship interstate product which is U. S. inspected and passed and so marked provided it is sound, healthful, wholesome, and fit for human food and has not been further processed or reprocessed other than under super-

vision of the Federal Meat Inspection Branch.

25.4 Regulations covering the interstate movement of meat and meat food products via parcel post are written in Part 321.22 of the Postal Manual. It is usually helpful when dealing with a postmaster to make reference to his guiding regulations as well as the applicable provisions of the Meat Inspection Regulations.

25.5 Our regulations relative to interstate transportation of meat and meat food products are fully covered in General Circular No. 2-D of the Railway Express Agency, Inc. Reference is usually made to this publication when

the Express Agency is involved.

25.6 When shipments concern the railroad companies, reference is made to Freight Tariff No. 362-B and Supplements issued by L. E. Kipp, Agent. This contains, for the use of railroad employees, applicable parts of our

regulations.

25.7 The form of the shipper's certificate and applicable requirements of this section of the regulations should be used in connection with the movement of federally inspected horse meat or horse meat food products by proper alteration and identification to show the term "horse" preceding the word "meat"; that is "horse meat" or "horse meat food products."

25.8 Product that is U. S. inspected and passed and so marked when shipped from an official establishment and conveyed interstate by vehicles belonging to the establishment need not be covered by certification outlined in sec-

tion 25.5 of the regulations. This same ruling applies to federally inspected and marked product transported interstate by individuals in their own vehicles.

- 25.9 There are provisions in the regulations for the transportation of certain products under official seal. A warning tag should be attached with the seal. Such warning should tend to minimize the mishandling of the seal by unauthorized persons.
- 25.10 Provision is made for the shipment under Branch seal from one official establishment to another of product which carries certain restrictions or which necessitates further processing or special handling. Proper shipper's certificates must accompany these shipments whether they involve interstate or intrastate movement.
- 25.11 Tank cars of inspected and passed rendered animal fat moving between official establishments shall be marked as outlined in section 16.16 of the regulations.
- 25.12 Inspectors in charge are directed to report by letter to the Washington office after a reasonable waiting period, the nonarrival of sealed cars. Full information should be given regarding kind of product, vehicle identification, and originating establishment with other pertinent facts, including a statement from the establishment concerning their knowledge of the transaction.
- 25.13 The form "Notice of Unmarked Meat Shipped Between Official Establishments Under Seal" should accompany shipments of products under seal between official establishments. The form need not contain a detailed description of the marked product. Since it is known that the unmarked product constitutes at least 25 percent of the lot moving under seal, the weight of the marked product should be entered, and it should be described as "various" if that term is applicable. However, the unmarked product should be described in detail as should also restricted product such as "U. S. Passed for Cooking" or "pork product —— o F. ——days refrigeration" or "beef passed for refrigeration."
- 25.14 Meat food products not bearing the mark of Federal inspection, such as cured ham, bacon, lard, sausage, and the like, as well as hamburger and chip steaks, which are transported or offered for transportation in interstate commerce under a certificate of exemption, may be disposed of only to consumers, such as families, res-

taurants, hotels, and clubs, and not to any person or firm for resale as such.

- 25.15 (a) For a shipment of meat or meat food products to be accepted by a common carrier for transportation in interstate commerce under the authority of a certificate of exemption, it must be covered by a shipper's certificate, executed in duplicate, in the form set out in section 25.10 of the regulations. It is required that both the original and duplicate copy of the shipper's certificate be delivered to the agent of the transportation company accepting the shipment. The Branch does not provide these forms, and if the carrier fails to do so, the holder of the certificate of exemption shall furnish his own.
- (b) When meat or meat food products are transported in interstate commerce under authority of a certificate of exemption in the private conveyance of the holder thereof, he shall execute and mail to the Branch a shipper's certificate for each interstate movement. However, when deliveries are made by private conveyance during any 1 day to several customers in other states who are consumers, an individual shipper's certificate for deliveries to each such customer is not necessary. Only one shipper's certificate showing the kind and total amount of product for that day and listing the consignee as "various" will be required. In cases where fresh meat not bearing the mark of Federal meat inspection is transported interstate in the private conveyance of the exemption certificate holder to another retail meat dealer, a shipper's certificate for each such interstate movement should be executed and mailed to the Branch. Shipper's certificates covering interstate transportation by private conveyance need not be mailed to the Branch oftener than once a week.
- (c) A new form of shipper's certificate for use of holders of a certificate of exemption has been found to be more legible and an improvement over the old type certificate. Retail dealers and butchers are urged to change to this new form as soon as possible. Whole carcasses or quarters should be listed as such under "Fresh Meats". The weight of the carcasses or quarters should also be included in the box "Number of Pounds" under "Fresh Meats" and added to the number of pounds of fresh meats shipped as trimmings or cuts if the certificate issued covers both carcasses and quarters, and fresh meats other than carcasses and quarters.

In reporting processed meats such as chopped, cooked, cured, dried or canned meat, sausage, lard and such products, it will not be necessary to list each kind of product separately; they may all be grouped together and reported as one figure.

(d) It is urged that the form, see p. 137, of shipper's certificate be used by retail butchers and retail dealers who are holders of certificates of exemption. It should be printed on a good grade of paper exactly 3½" x 8" in over-all size. Certain entries that do not vary may be printed on the form; for instance, the shipper, his address, the exemption certificate number, and probably the point of shipment.

25.16 Identification of product derived from animals slaughtered by a farmer on the farm is acceptable if his name and address appear on the product by means of a brand, tag, label, or other appropriate means. The definition of a farmer appears in paragraph 21(a) of the Meat

Inspection Act.

25.17 Meat and meat food products derived from cattle, sheep, swine, goats, or horses, that are to enter interstate or foreign commerce, must be U. S. inspected and passed and so marked, that is, fully prepared in an establishment operating under Federal meat inspection—unless the meat and meat food products are exempt from inspection. There are no exemptions from inspection provided by the Horse Meat Act, although the Meat Inspection Act provides for certain exemption for meat and meat food products derived from cattle, sheep, swine, and goats.

Therefore, nonfederally inspected meat and meat food products derived from cattle, sheep, swine, goats, or horses, that are not exempt from inspection must be treated (denatured) in a manner to alter their resemblance to an article of human food if moved interstate. This would apply to animal food composed in whole or in substantial part of material derived from cattle, sheep, swine, goats, or horses. The Federal Meat Inspection Branch will give an opinion of the acceptability of the denaturing

when furnished a sample.

However, animal food packed in hermetically sealed, retort processed, conventional retail-size (approximately 1 pound) containers and labeled conspicuously as, for example, "animal food," "dog food," "dog and cat food," and the like, is not required to be denatured. This means

SHIPMENT OF MEAT OR MEAT FOOD PRODUCTS BY RETAIL BUTCHERS OR DEALERS

Wake in dual codes and an arrangement of the state of the	The copies of the copy to Crief, Meat Inspection Branch, U.S. Department of Agriculture, Washington 25, D. C.	I hereby certify that I am a retail butcher or a retail dealer in meat or meat food products; that the following described meat or meat food products are offered for shipment in interstate or foreign commerce under a certificate of exemption issued to me by the United States Department of Agriculture, and that at this date they are sound, healthful, wholesome, and fit for human food, and contain no preservative or coloring matter or other substance prohibited by the Federal meat inspection regulations.
Ma		H W X

CONSIGNEE'S NAME AND POINT OF SHIPMENT CONSIGNEE'S NAME AND DESTINATION FRESH MEATS SPECIES SPATE CONRED. OR RED. O					E AEMT 110	EXEMPITON CERTIFICATE NO.	TE NO. MONTH	TH DAY YEAR
S NAME AND DESTINATION FRESH MEATS SS BEEF (1) VEAL (2) MUTTON (3) LAMB (3) PORK (5) GOAT (4)	SHIPPER'S NAME AND POIN	T OF SHIPMEN	L-2			177		STATE
ES BEEF (1) VEAL (2) MUTTON (3) LAMB (3) PORK (5) GOAT (4)	CONSIGNEE'S NAME AND DE	STINATION			U	117		STATE
ES BEEF (1) VEAL (2) MUTTON (3) LAMB (3) PORK (5) GOAT (4)				MEATS				
) VEAL (2)	MUTTON (3) LAMB (3			GOAT KID	PROCESSED MEATS SUCH AS SALTED.
	NUMBER OF CARCASSES							CANNED MEAT: SAUSAGE, LARD.
	NUMBER OF POUNDS							Pounds

that the name of the product, such as "dog food," should appear on the main panels of the label in letters at least three times larger than the letters used in the words describing the materials derived from cattle, sheep, swine, goats, or horses, wherever the latter appear on the label, and with the background being equally as contrasting in the case of the former as in the case of the latter. In judging the 3 to 1 ratio, the height, width, and thickness of the letters are taken into consideration. If it is desired to use a label in lieu of denaturing the canned article, it is suggested that a sketch of the proposed label be sent to the Washington office. If found acceptable, the finished label can be printed. If the sketch is to be returned, two copies should be furnished. The color scheme should be indicated.

Jurisdiction exercised by the Federal Meat Inspection Branch over labeling in lieu of denaturing in connection with canned animal food moving interstate comes from the applicability of the Federal Meat Inspection Act or the Federal Horse Meat Act and regulations promulgated thereunder. This does not override the authority of any other agency having jurisdiction in connection with the interstate movement of canned animal food.

25.18. The various forms used in reporting the transactions arising from the application of section 25.13 of the regulations will be handled at the station when permits are issued for the return to an official establishment of alleged unsound meat or product that is in commercial channels. This will mean that the triplicate copy of the Form M. I. 409–1 (formerly Form M. I. 131) will not be sent to the Washington office. However, the original copy of the permit will be handled by the initial carrier as indicated in the regulations and mailed to the Washington office. It will no longer be necessary to use Form M. I. 409–2 (formerly Form M. I. 131–B), as the disposition of the returned alleged unsound product can be noted on the station copy of the Form M. I. 409–1 without any report of its disposition being made to the Washington office.

Forms (409–1 triplicate and 409–2) used in connection with permits issued under the authority of the Washington office in accordance with the proviso in paragraph 25.13(d) of the regulations should be sent to the Washington office in accordance with the instructions on the

forms.

In the event it is necessary to denature nonfederally inspected rendered fat which resembles an edible product and which is offered for exportation, importation, or interstate movement, the following denaturants may be used in the proportions indicated below. To each 750 pounds of fat, use:

(a) One-third ounce brucine dissolved in a mixture of two parts alcohol (ethyl, methyl, isopropyl, or denatured) and four parts pine oil or oil of rosemary. (The amount of alcohol and pine oil or oil of rosemary is not specified as it is only required that enough be used to dissolve the one-third ounce of brucine.)

(b) One-half gallon of creosote.

(c) Two gallons pine tar.

(d) One-fourth gallon pyridin.

(e) One-half gallon No. 2 fuel oil or approved mineral oil.

The foregoing denaturants may also be used to denature fats offered for importation in the unmelted state, but it will be necessary to increase the volume of the brucine mixture denaturant so that there will be enough to place it in the bung borings into the fat in different directions so that there is for each 750 pounds of unmelted fat onethird ounce of brucine dissolved in a one-half gallon mixture consisting of ethyl, methyl, isopropyl, or denatured alcohol and one and one-third ounces of pine oil or oil of rosemary.

It is the shipper's responsibility to see that the article

is acceptably denatured.

PART 26—FEDERAL FOOD, DRUG, AND COSMETIC ACT

The following is quoted from a memorandum by Dr. L. D. Elliott, Acting Commissioner of Food and Drugs, Food and Drug Administration, Federal Security Agency, Washington, D. C. The quotation deals only with meats and meat food products which are located outside inspected premises and it is a clear statement concerning the integration of the Federal meat inspection and Federal food and drug activities in that connection:

"After discussing with Dr. Miller operations in meat,, I advised him that Mr. Olsen had suggested that, for the benefit of our field stations, we restate the policy and procedure regarding the action which should be taken under our law against interstate shipments of meats and meat food products found to be violative of the provisions of our law. I pointed out that we had been operating under the general understanding that since the Meat Inspection Act had no seizure provision, the Meat Inspection Division in general welcomed our invoking our seizure provisions to remove from the market any meat food products which were unsound and unwholesome.

"As a result of my discussion with Dr. Miller this day, I am setting down below the following facts and procedures as a guide to our stations when they encounter interstate consignments of inspected meat or meat food products which are adulterated in any substantial manner.

"Section 902 (b) of our law exempts meats and meat food products from its provisions to the extent of the application of the Meat Inspection Act. Since the Meat Inspection Act contains no seizure provisions, meats and meat food products which are violative of our Act are therefore not exempt from seizure under our law. The Meat Inspection Division has in the past and will continue to welcome seizure actions by us against violative meat food products found in interstate channels in the interest of the protection of the public in view of their own inability to take such action. If a M. I. D. inspector, or other representative of that agency stationed anywhere in the field, encounters a consignment of a meat product which he finds to be or has reason to suspect of being unsound and unwholesome, he has no authority under his law to institute action against it but he has the responsibility of calling the consignment to the attention of the nearest available regulatory food official who does have the authority to seize it or to put some restraining order on it to prevent its distribution to the consuming public. If the inspector is located in one of our station cities or where one of our inspectors may be nearby, he calls it to the attention of our station or inspector, and in so doing he is saying in effect that the Meat Inspection Division is turning the consignment over to the Food and Drug Administration for whatever action it deems appropriate under its seizure provisions. If the M. I. D. inspector happens to be located at a place remote from any of our people, but near a state official, he would call the attention of the state official to a violative consignment for whatever action the state official might desire to take under his law.

"If an obviously violative interstate shipment of meat food product is located or detected by our own people rather than by a M. I. D. field inspector, the Meat Inspection Division has no objection to our proceeding with action under our law, but expects us to notify the nearest M. I. D. office of the facts not only as a matter of maintaining proper cooperative contact, but to enable the Meat Inspection Division to institute a prompt investigation at the establishment where the consignment originated to locate and correct conditions that might be responsible for the deterioration of the product.

"Sometimes the consignee of a shipment, upon suspecting it of being unsound or otherwise unfit for food, desires to ship it back to the inspected establishment where it originated. However, the Meat Inspection Act, according to my understanding, makes both the shipper and the carrier amenable to the penal provisions for the interstate shipment of an unsound meat food product. Therefore, to take care of the situation where a consignee desires to ship the suspected consignment back to the establishment where the Meat Inspection Division can reassume jurisdiction, the Meat Inspection Division is authorized to issue a permit to the reshipper and carrier, which in effect exempts them from the penal provisions of the Act on that particular reshipment. The issuance of such a permit is not to be interpreted as a desire on the part of the Meat Inspection Division that the Food and Drug Administration refrain from seizure of the goods in the hands of the consignee. As a matter of fact, since the Meat Inspection Division has no jurisdiction over the goods shipped under such a permit until they reach the inspected establishment, there is nothing to prevent the diversion of the consignment enroute.

"The M.I.D. is perfectly willing for us to proceed with any contemplated seizure so that if the goods are subsequently taken down under bond for reshipment to the inspected establishment for segregation and destruction of the unfit material, there will be the

additional safeguard of a bond."

PART 27—IMPORTED PRODUCTS

27.1 The regulations in Part 29 of the Meat Inspection Regulations have been extended to cover the importation of horse meat and horse meat food products, When and if the horse meat inspection of any foreign country is recognized, the name of such country will be added to Section 29.10 of the Meat Inspection Regulations.

27.2 It must be constantly borne in mind that meat and meat food products derived from ruminants or swine are also subject to restrictions imposed by an order known as BAI Order 373 when imported from countries in which the contagious and communicable disease of rinderpest or

foot-and-mouth disease exists.

27.3 To be acceptable, the foreign meat inspection certificate in the form prescribed in section 27.6 of the regulations must be signed by an official authorized by the National Government of the foreign country in which the product is prepared and whose name and signature have been officially published by the Branch. A foreign meat inspection certificate approved and published by the Branch may be accepted in lieu of the foregoing described certificate regardless of whose signature appears

thereon if otherwise acceptable.

27.4 It occasionally happens that a consignment of canned meat or meat food product covered by one foreign official meat inspection certificate will be separated into several lots. These lots will be unloaded at various ports. Usually such shipments consist of canned product from South American countries. For the handling to be uniform at various ports, the station to which is presented the original official meat inspection certificate covering the entire consignment will request the broker to furnish sufficient copies (photostat) so there will be one of the latter for the inspector in charge at each of the stations to which one of the lots comprising the consignment is destined. The initial station will authenticate each of the certificate copies, placing on it the name of the station to which the copy applies and the number of cases of product that will be put ashore there. The original certificate will be marked to indicate the same information, but if there is not sufficient space on the certificate to do this, then the information shall be placed on a separate sheet and securely affixed to the certificate. When it is sent to Washington the Form M. I. 410-2 that accompanies the

original certificate should be directed to the attention of the Special Projects Section.

- 27.5 There is available Form M.I. 410-8, Application for Inspection of Meat and Products for Importation, which may be used by importers for making applications for inspection of imported product. Other means satisfactory to the inspector in charge may be used to make applications for import inspection.
- Inspectors in charge occasionally receive requests to inspect at other than official establishments product offered for importation. They are authorized to respond to such requests in connection with imported product handled in accordance with Section 27.8 of the regulations. This applies whether the product is located within the limits of the official station or substation or at a place so situated geographically that the import inspection would logically be handled by the station receiving the request. In the latter case, the availability of an inspector must necessarily be considered. For example, if the meat inspection work in any of our small stations is such as to require the constant attention of the inspector or inspectors there assigned to a degree that the request cannot be honored then the person making request for service should be so informed and asked to resubmit his request to the inspector in charge of a larger station where an inspector would be available, either near the place where the product is located or to the Washington office. In some cases, the inspector in charge may transmit such a request to the Washington office if he thinks such action is desirable.

The party requesting the inspection service is to reimburse the meat inspection appropriation for the expense of travel and subsistence that an inspector incurs while away from his official station, but no charge shall be made for the time of the inspector against the person or firm requesting the service. Information should be given to the Washington office on the current billing form. The employee is to claim reimbursement in the regular manner on standard Form 1012. The party requesting the service is to reimburse the meat inspection appropriation for inspection during overtime period.

27.7 It is very important that a thorough and comprehensive examination be made of product offered for importation so that only that which meets the requirements

is eligible for entry as U.S. inspected and passed product. Foreign canned, shelfsize hams (less than threepounds) are products that fall in a special category. The import inspection procedure differs from that followed with usually stable products such as canned corned beef, canned roast beef parboiled and steam-roasted, and the like. They are also handled differently from the "Perishable, Keep Under Refrigeration" type of product. It is a requirement that shelfsize canned hams be processed for a sufficient period of time and at a high enough temperature to make them stable. To determine this, it has been found necessary to incubate samples from each lot. It is required that the importer arrange for the incubation which should be at a place that is suitable as well as satisfactory to the inspector in charge. The initial sample inspection of 5 to 10 percent should reveal less than onequarter of one percent unsound and/or suspicious cans. If this is so, then there is incubated one case which is usually twenty-three cans after one has been used for sample purposes. Should suspicious or unsound can or cans develop upon incubation, a detailed report should be furnished the Washington office. You will then be instructed whether further action is to be taken or whether the lot should be refused entry.

27.8 The number of cans found upon sample inspection to be unsound owing to nail or hook holes, crushed or badly damaged seams or other external marks of violence need not be included in the total number of unsound cans when the calculation is made to determine the percentage suspicious and unsound of a consignment. However, disposition of such unsound cans must be in accordance with the regulations, and their suitability for entry must be judged on the findings.

27.9 Special reports are requested for importations of cured meat the destination of which is restricted to establishments maintained under Federal meat inspection because foot-and-mouth disease or rinderpest is present in the country of origin. Information from the U.S. Customs Service is to the effect that in many cases in which some of the meat is refused entry or is condemned, this amount takes a different rate of duty from the amount passed for entry, depending on how the meat is disposed of.

Accordingly, when there are any entries in the "refused

entry and/or condemned" columns on Form MI-410-2 (formerly 109J), the disposition of the meat should be given by adding to the form one or all of the statements below as the case may be:

If the second statement is used, indicate the method of destruction such as "destroyed by incineration." If the third statement is used, give the name of the country to which the meat is exported, for example, "exported to Mexico." Naturally, none of the statements need be added if all of the meat is passed for entry.

The Customs Service has furnished information that sometimes inspectors have failed to report the disposition of product following import inspection. In some cases, the entries have been nearly a year old. Close attention should be given to sending the duplicate copy of MI Form 410–2 to the Collector of Customs at the port of entry without delay. The instructions on the footnote of the form and in section 27.15 of the Meat Inspection Regulations should be closely observed.

27.10 When any condition or circumstance out of the ordinary is reported on Form 410-2 (109-J), the Washington copy should be directed to the attention of the Special Projects Section. A transmitting letter is usually not necessary, but Form AD 514 (reference slip) or a

small slip of paper may be used.

27.11 When it is necessary to correspond with the Branch concerning a particular consignment of imported product, it is important that full identification of the shipment be given in the opening paragraph of the letter. This should include:

(a) Number of cases, where canned product is in-

volved, or weight of bulk shipment.

(b) Number and size of units in the container.

(c) Name of the product, including the brand name.

(d) Country of origin.

(e) Name of vessel or car number.

(f) Date of arrival.

(g) Customs entry number.

(h) Name and address of consignor.
(i) Name and address of consignee.
(j) Any other pertinent identification.

For example: 2,000 cases (48/12) blank brand canned corn beef, Product of Argentina, ex S. S. Rowboat, November 12, 1949, customs entry No. 2 consigned by blank blank and company, Buenos Aires, Argentina, to blank and company, 211 East First Street, N.Y.

This is the reason that many inquiries from brokers and importers are received so it is highly necessary that our files be complete in identity.

27.12 Foreign product presented for importation bearing grade markings the same as those used by the Meat Grading Branch, Agricultural Marketing Service, United States Department of Agriculture shall not be passed for entry into this country until such time as the grade markings have been verified by an official representative of the

Meat Grading Branch.

27.13 Five copies of the Form M. I. 422–2 will be prepared at the station for each sample of imported product. The form should bear a statement indicating whether a copy of an approved label is on file at the station. The original and three copies will be forwarded with the sample, one copy being attached to the sample by whatever means are most appropriate. The fifth copy will be retained in the station file. When the laboratory findings are completed they shall be reported on three of the copies received from the station with the sample. The original shall be returned to the inspector in charge, one copy shall be forwarded to the Special Projects Section in Washington, D. C., and another copy shall be retained by the laboratory for an office record.

When the sample is not passed by the laboratory because it does not comply with some regulatory requirement, the fourth copy will be utilized by the chemist in charge; otherwise it may be discarded. He will in such cases be returning to the station two copies showing the laboratory findings. If there is not sufficient space on the face of the form for this, the top part of the reverse side

of the form may be used.

The inspector at the station will show the disposition made of the product on the reverse side of the forms and will send one copy to the Special Projects Section in Washington, D. C., retaining the other for the station file.

27.14 The maximum quantity of hams, bacon, and fresh 100 pounds: canned meats, sausage, and similar products meat permitted entry for personal use of the consignee is

other than summer sausage is 50 pounds; lard, 20 pounds; summer sausage, 20 pounds.

- 27.15 The instructions relative to personal consumption entries are amplified to require that boneless cured or cooked meat from countries in which exist food and mouth disease or rinderpest must be entered and handled in the same manner as regular commercial importation in order to comply with Animal Inspection and Quarantine Branch ruling.
- 27.16 (a) The form and substance of the meat inspection certificates of the following foreign countries have been approved as conforming to requirements of sections 27.6 (e) and (f) of the meat inspection regulations. Such certificates are acceptable to cover importations of meat and meat food products from these countries regardless of whose signature appears on the certificates. Unless otherwise indicated, the certificates comply with section 27.6 (e):

Argentina Iceland

Australia Ireland (Eire)

Belgium Italy

Brazil Madagascar Mexico

Canada Mexico
Cuba Netherlands

Czechoslovakia New Zealand

Denmark Northern Ireland

Dominican Republic Norway
England and Wales Paraguay
Finland Poland
France Scotland

Germany (Federal Republic)

Spain

Sweden

Uruguay

The foreign meat-inspection certificate is to be forwarded to the Washington office with the original of completed

Form M. I. 410-2 (formerly 109-J).

(b) Meat-inspection certificates from Poland and Czechoslovakia should be authenticated by an American Consul or Vice Consul to be acceptable. The form of authentication is given below:

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I, (name of authenticating officer), (title), duly commissioned and qualified, do hereby certify that (name of officer) signing (name of country) meat inspection certificate, has been declared by competent (name of country) authorities to have been, at the time he signed the annexed certificate, (title of meat inspector), fully competent to sign and assume responsibility for such a certificate.

In Witness Whereof I have hereunto set my hand and affixed the seal of the (title of American mission) at

(place) this day of, 19

(Signature of officer)
(Official title of officer)

Service No.

Item No. 38, no fee

27.17 Facsimiles of approved foreign meat-inspection certificates and the names and facsimile signature of officials authorized by their governments to issue official foreign meat inspection certificates follow.

ARGENTINA





Argentina

MINISTERIO DE AGRICULTURA Y GANADERIA DIRECCION GENERAL DE SANIDAD ANIMAL

EXPORTACION A LOS ESTADOS UNIDOS DE NORTE AMERICA CERTIFICADO DE INSPECCION DE CARNES Y SUS DERIVADOS COMESTIBLES

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	So corrifica par ol presento, que	la corne y derivados comestibles de la mismo,
	detallados en este certificado, proceden	de enimales (*)
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	que no continen ni hen sido tratados co	n ningún prezervativo, materia colorante, vi etra
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	del Ministerio de Agricultura de los Esid	edas Unidos de Norte Américo.
	MARCAS DE IDENTIFICACION EN	LAS CARNES O LOS BULTOS
	Remitente	
	Procedencia	
	Vapor	Destine
	Consignatorio	
	Marcus de embarque	

	DETALLE DEL CARGAMENTO	
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7011....

AUSTRALIA



COMMONWEALTH OF AUSTRALIA.

The Commerce (Trade Descriptions) Act 1905-1933.

DEPA	KIMENI OF	COMMERCE	AND AGRIC	JULTURE.	
Certificate as to Suitability	y of Meat, C	anned Meat, M	leat Extract,	, or Meat Essence f	or Export

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	as the Diste	•	*********

* Invest number of carcasses, cases, &c., as the case may be.

By Authority: L. P. JOHNSTON, Commonwealth Government Printer, Canteers,

BELGIUM

(Par. 27.6 (f) of the Meat Inspection Regulations)



of Belgium

MINISTRY OF PUBLIC HEALTH

VETERINARY SERVICES

Official Meat Inspection Certificate

for pork and pork products

hereby certify that the article or articles herein described are of a kind prepared customarily to be eaten without cooking, and contain muscle tissue of pork which, when fresh or freshly cured in salt, were subjected to a temperature not higher than 5° F. for not less than 20 days or otherwise treated as specified by the Chief of the Bureau of Animal Industry, and that said articles contain no muscle tissue of pork which has not been treated as herein specified.
Kind of product: Number of pieces and packages: Weight: Identification marks on meats and packages:

	uct: Number of pieces and packages: Weight: marks on meats and packages:
Consignor:	***************************************
Address :	
Consignee :	**************************************
Shipping man	rks : ,

Seal of Veterinary Inspector

Veterinary surgeon appointed by the Government

(0.)

BELGIUM

(Par. 27.6 (f) of the Meat Inspection Regulations)



of Belgium

MINISTRY OF PUBLIC HEALTH

VETERINARY SERVICES

Official Meat Inspection Certificate

for pork and pork products

hereby certify that the article or articles herein described are of a kind prepared customarily to be eaten without cooking, and contain muscle tissue of pork which, when fresh or freshly cured in salt, were subjected to a temperature not higher than 5° F. for not less than 20 days or otherwise treated as specified by the Chief of the Bureau of Animal Industry, and that said articles contain no muscle tissue of pork which has not been treated as herein specified.

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Address :	
Consignee:	
Destination:	
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Seal of Veterinary Inspector

Veterinary surgeon appointed by the Government

(0.)

BRAZIL



MINISTERIO DA AGRICULTURA DEPARTAMENTO NACIONAL DA PRODUÇÃO ANIMAL DIVISÃO DE INSPEÇÃO DE PRODUTOS DE ORIGEM ANIMAL

Statute St

CERTIFICADO OFICIAL PARA PRODUTOS CARNEOS COMESTIVEIS

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Imp. Nov. - 10.710

CANADA



CANADA DEPARTMENT OF AGRICULTURE PRODUCTION SERVICE HEALTH OF ANIMALS DIVISION CERTIFICATE

FORM PHA 32

COVERING MEAT AND CANNED FOODS No. 310303

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ESTINATION SHIPPING MARKS HAME OF VESSEL OR CAR NO. AND INITIALS)	NLOADED A	Y WIRE MUST SE SEP	IN TRANSIT, OTHER THAN A	CHANGE IN MODE

SIGNATURE OF OFFICER OR AGENT OF CARRIER MAKING INDORSEMENT

ORIGINAL

ATTACH TO EXPORT ENTRY FORM BI3 TO BE HANDED TO OFFICIAL AT PORT OF EXIT FROM CANADA

CANADA

(Par. 27.6 (f) of the Meat Inspection Regulations)

H. of A. Form 34

DOMINION OF CANADA

DEPARTMENT OF AGRICULTURE—HEALTH OF ANIMALS BRANCH

MEAT AND CANNED FOODS DIVISION

PLACE	DATE	
EST. No.		*******************************
Official Meat Inspection certifica articles, or articles of a kind, prepared tissues.	te for Pork, and Pork Products, for shipmer customarily, to be eaten without cooking,	nt to United States, of which contain muscle
without cooking, and contain muscle ti subjected to a temperature not higher t	or articles herein described are of a kind ssues of pork which, when fresh, and fresh han 5% Fah. for not less than twenty days of the Animal Industry, and that said article eated as herein specified.	ly cured in salt, were, or otherwise treated
KIND OF PRODUCT	No. OF PIECES OR PACKAGES	WEIGHT

*		
Identification Marks on Meats and Pag	kages	
A Committee of the Comm		
70 + 01 51 T F 0 51/0	Address	
Consignee	Destination	
Shipping Marks (Name of vessel, railwa	y or express)	······································
»·····································		
	Shipment supervised by	

CZECHOSLOVAKIA



REPUBLIKA ČESKOSLOVENSKÁ

Úřední potvrzení o prohlídce masa.

Miseo	Ceskoslovensko,	Datum	19
Potvrzuji tímto, že maso vepřů neb koz, které byly pře tyto výrobky z masa jsou zdrok lidské výživě, dále že nebyly látek ani jiných, které nejsou o zemědělství Spojených Států S z masa bylo v Československi	ed i po porážce veteriná tvé, zdravotně bezzávadí y upravovány konservot dovoleny předpisy o kon Severoamerických, a kor	item prohlédnuty né, zdravi prospéti vadly a barvivy a s strole mass, vydar nečně, te tímto m	a že toto maso nebo ne a i jinak způsobilé že neobsahují těchto nými Departmentem asem anebo výrobky
Druh sbott	Počet kusů na	ebo atsilek	Váha
Označení totoźnosti na mase a . Jméno a adresa dodavatele:			
Iméno a adresa pfijemce:			
Znacky dopravní:			militari ili mais ili mana militari a massa si sini a massa si si sani di massa si
Otedat restike.	(Po	ápis a kodnost veteriná	te prohlidkou poveteneho.)

Cit. ald.: 416. Scient dahiras v-Prase 1905-1976.

CZECHOSLOVAKIA

(Par. 27.6 (f) of the Meat Inspection Regulations)



REPUBLIKA CESKOSLOVENSKÁ.

Úřední potvrzení o prohlídce vepřového masa a výrobků z něho.

Misto	00-1011001001000-00100-001000-0000-000	Ceskoslovenskö.	Datum	······································
bez vatení, chováno po nebo s nin Industry Si	že obsahuje veptov o dobu ne kratší n nž bylo jinak nakl pojených Států Sev	, zde popsané, jest toho /é maso, které bylo v če cé 20 dnů při teploté n ládáno tak, jak předep /eroamerických, a že t n způsobem, neř jak je	erstvém nebo čerst ne vyšší než 5° Fal osáno přednostou oto zboží neobsal	vé nasoleném stavu renheita (–15°C). Bureau of Animal
	Druh shett	Počet kust ne	rbo sásilek	Véha
Territoria de la comoción de la como				
Označení to	tofnosti na mase a o	balech:	•	ogs ganaggas a stiggere . Gallet allet a : a ins first agen 200 i de d'éderties
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Znacky dopre	ovni:	Materials	r conta aquilla anno 1990 e a se a rea ca te agga de da combon 1900 de 4	gr grésaux vans v 1000000 Annahig 1700000 to to tr 10000 17774400
	todal resithe.	894 1000 100	pis a hodnost veterináfe	MANAGE - 1-4

Pernámia: Toto dřední potvrzení musí provázetí každou zásilku veptového mase a výrobků, připrevených k jidlu bez
dodotečného veření (uzezina, zlteřiene a zWestphalice šiznky a pod.). Toto dřední potvrzení musí býti předlodene příjemesta nebo jeho zástuposm inspektoru Departmentu gemédřiství při prohlidce ve Spojených Státech.

DENMARK



.

KINGDOM OF DENMARK

Ministry of Agriculture

Veterinary Department

Official meat-inspection certificate.

City:

DENMARK.

Date:

I hereby certify that the meat and meat food products herein described were derived from cattle, sheep, swine, or goats which received ante-mortem and post-mortem veterinary inspections at the time of slaughter, and that such meat and meat food products are sound, healthful, wholesome, and otherwise fit for human food, and have not been treated with, and do not contain, any preservative, coloring matter, or other substance not permitted by the regulations governing the meat inspection of the Danish Ministry of Agriculture, and that said meat and meat food products have been handled only in a sanitary manner in this country.

(Jeg attesterer herved, at nedenfor beskrevne Kod og Kodprodukter stammer fra Kvng, Faar, Svin eller Geder, som blev underkastet Veterinærkontrol umiddelbart før og umiddelbart efter Slagtningen, og at nævnte Kod og Kodprodukter er sunde og tjenlige til Menneskefode og ikke er behandlet med eller indeholder noget Konserveringsstof, Farvestof eller andet Stof, som ikke er tilladt i de af det danske Landbrugsministerium fastsatte Bestemmelser om Kodkontrol, samt at nævnte Kod og Kodprodukter her i Landet udelukkende er behandlet paa en hyglejnisk Maade.)

Kind of product: (Varens Art)

Number of pieces or packages: (Antal colli)

Gross-Weight: (Bruttovægt)

Nett-Weight: (Nettovægt)

Identification marks on meats and packages: (Veterinære Kontrolmærker paa Kod og Embaliage)

Consignor: (Afsender)

Address:

Consignee: (Modtager)

Destination: (Besteinmelsessted)

Shipping marks: (Afsenderens Fragtmærker)

DENMARK

(Par 27.6 (f) of the Meat Inspection Regulations)



KINGDOM OF DENMARK

Ministry of Agriculture

Velerinary Department

Official meat-inspection certificate for pork and pork products.

(For shipment to the United States of articles of a kind prepared customarily to be eaten without cooking, which contain muscle tissue of pork).

(For Forsendelse til U.S.A. af Varer af en Art, saaledes tilberedte, at de sædvanligvis spises uden forudgaaende Kogning eller Stegning, og som indeholder Muskelvæv af Svin).

City: DENMARK. Date: (By) (DANMARK.) (Dato)

I hereby certify that the article or articles herein described are of a kind prepared customarily to be eaten without cooking, and contain muscle tissue of pork which, when fresh or freshly cured in salt, were subjected to a temperature not higher than 5° F. for not less than 20 days, or otherwise treated as specified by the Chief of the Bureau of Animal Industry, and that said articles contain no muscle tissue of pork which has not been treated as herein specified.

(Jeg attesterer herved, at Varen eller Varerne beskrevet herl er af en Art saaledes tilberedt, at de sædvanligvis spises uden forudgaaende Kogning eller Stegning, og indeholder Muskelvæv af Svin, som i fersk eller let saltet Tilstand blev underkastet en Temperatur ikke højere end 5° F. (÷ 15° C.) i ikke imindre end 20 Dage, eller behandlet paa anden Maade, som foreskrevet af sthe Chief of Bureau of Animal Industrye, og at nævnte Varer ikke indeholder noget Muskelvæv af Svin, der ikke er blevet behandlet efter nævnte Forskrifter.)

Kind of product: (Varens Art)

Number of pieces or packages: (Antal Colli)

Gross-Weight: (Bruttovægt)

Nett-Weight: (Nettovægt)

Identification marks on meats and packages: (Veterinære Kontrolmærker paa Kod og Emballage)

Consignor: (Alsender) Address: (Adresse)

Consignee: (Modtager)

Destination: (Bestemmelsessted)

Shipping marks: (Afsenderens Fragtmærker)

DOMINICAN REPUBLIC

TORM 8 43

Rúa.

ORIGINAL

REPUBLICA DOMINICANA
SECRETARIA DE ESTADO DE AGRICULTURA.
PECUARIA Y COLONIZACION

OFICINA DE GANADERIA Y CRIA

CERTIFICADO OFICIAL DE INSPECCION DE CARNE Y PRODUCTOS DERIVADOS, PARA LA EXPORTACION

Ciudad Trujillo, Distrito de	E ECH a
Santo Domingo, Rop. Lom.	
CERTIFICO: Que las carnes y producte	os alimenticios de carnes aqui descritos,
	o cabras que recibieron al tiempo del sa-
• Control of the cont	ante-mortem y post-mortem; que dichas
	ablas y apropiados pira la alimentación
	n, ni contienen ningún preservativo, ma-
The state of the s	
	no permitidas por el Reglamento oficial
_	ltura, Pecuaria y Colonización y de la Se-
	istencia Pública, ambas de la República
	de carnes; y que dichas carnes y produc-
tos han sido manipulados de manera	sanitaria en este país.
Clase de producto.	Número de piezas o paquetes. Peso.
CONTROL TO A PARTICULAR DESIGNATION OF THE PARTICULAR DESIGNATION OF T	g ar need to extrust a cost administrative que construction, so equilipping a pathogas army the pathogas army to require the pathoga
10.0 Springering springering control of the control	Photos expensive contract of the description of the
digitarequations (650 mengangkat const.) (so rata) study a consistency injury as a grant of provincial provi	Office digitalization in the execution in the effect of the company control of the company
Señales de identificación en carnes	y paquetes
Embarcador	Dirección
Consignataric	Destino
Warcas de embarque	
	Firma
	MOMOL 6
	Inspector Veterinario

FORM A.



ENGLAND AND WALES

MINISTRY OF AGRICULTURE, FISHERIES AND FOOD

INSPECTION CERTIFICATE for use in connection with the EXPORT OF MEAT AND MEAT PRODUCTS TO U.S.A.

Place.	Date	
I HEREBY CERTIFY that was/were derived from animals inspection at the time of slaughte consumption, and has/have not prohibited preservative or colouri has/have been handled only in a	r and is/are sound, wholesome a been treated with and does/do ng matter, and that the said mea	mortem veterinary and fit for human o not contain any at*/meat products*
Official Certificate	SignatureCertifyi	05
authorised by the Ministry of Agriculture, Fisheries	Official Title	
and Food.	• Delete when not a	applicable.
	Ducto Wildi ilot	P.T.O.
Description	No. of Package	Weight
S. S		
7		
Identification Marks		
Name and address of Consignor	·	
Name and address of Consigned	:	
Conveyed by (Shipping Marks)		

			_	
177	NL	A	N	\mathbf{r}
L I	TATE	a	7.4	$\boldsymbol{\nu}$

V:0	

Kiranossementifin litjettävä todistus. Intyg ett bifogas kounossementet.

SUOMEN TASAVALTA



REPUBLIKEN FINLAND

MAATALOUSMINISTERIO - LANTBRUKSMINISTERIET ELAINLAÄKINTOOSASTO - VETERINARAVDELNINGEN

	77 m 5	. 440
Lihantarkastustodistu	s. – Köttko	ntrollintyg:
	päivän	iäkuuta 19
(paikka)		
(ort)	**************************************	(nd) 19.
Täten todistetaan, että allamainittu Härmed intygas, att nedannämnt kö	liha tai allama tt eller nedanna	ainitut lihatuot <mark>teet on saatu</mark> ämnda köttprodukter erhålli <mark>t</mark> s
eläinlääkärin sekä ennen teurastusta että	sen jälkeen ta	arkastamista eläimistä ja että
från djur, som undersökts av veterinär sa	ivät före som e	fter slaktningen och att det
se ne on hyväksytty voimassaolevan lihanta	irkastuslain mul	kaisessa järjestyksessä ihmie
den ordning gällande köttkontrollag föresl	kriver, godkānts	att såsom tjänlig till män
ravinnoksi kelvollisena maasta vietāväksi. niskoföda utföras ur landet.		
Táváralaji	Kollien lukumäärä	Palao
Varualag	Antalet kollyn	Vike
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		:
	- Lancarios de la presenta de la constanta de	
Lihan ja päällysten tunnusmerkit: Köttets och emballagets kännetecken:	nastasattirasi osar sossetniiga sistasatti	ort allanes por rase and nice registration out on the Grando registration distrib
Lähettäjä:	Osoite:	
Avsändare:	Adress:	.19.9
Vastaanottaja. Emottagare:	Määräpa Destinati	
Lähettamistapa:	Desilian	onsort,
Transportsätt:		
· · · · · · · · · · · · · · · · · · ·	nimi y.m.)	

Lihantarhastaja tai terveydenholvolautakunnan valtuutetu. Kõttkontrollör oller hälsevärdsnämadens legulimikitgada.

FRANCE

(Face of certificate)

REPUBLIQUE FRANÇAISE.

MINISTÈRE DE L'AGRICULTURE.

CERTIFICAT DU SERVICE OFFICIEL DE L'INSPECTION DES VIANDES.

Lieu:	· ··· · · · · · · · · · · · · · · · ·	Date :	
(ville)			

Je certifie par la présente que la viande et les produits d'alimentation carnée décrits ci-dessous au verso proviennent d'animaux des espèces bovine, ovine, porcine ou caprine qui ont été soumis « ante-mortem » et « post-mortem » à des inspections du Service vétérinaire au moment de l'abatage, que cette viande et ces produits d'alimentation carnée sont parfaitement sains et irré-prochables au point de vue hygiénique et à tous autres égards propres à la consommation humaine, qu'ils ne renferment et n'ont été traités avec aucune matière préservatrice ou colorante ou autre substance non autorisée par les règlements relatifs à l'inspection des viandes sous le contrôle du Ministère de l'Agriculture des États-Unis d'Amérique, règlements enregistrés à mon service, et que ladite viande et les dits produits d'alimentation carnée n'out été manipulés dans ce pays qu'avec toutes les précautions sanitaires désirables.

PRANCE

(Reverse side)

NATURE DU PRODUIT.	NOMBRE DE MORCEAUX of de colls.	POIDS.
Marques d'identification sur les vian	des et les colis:	
Expéditeur:	Adresse:	
Destinataire:	Lieu de destination:	
Marques d'expédition :		
	Signal	ve:
(Non-la-France of the Community	- Alice B - A - A - A - B - B - B - A - A - B - B	
d'alimentation carade à exporter, ous Lie	national qui est autorisé à délivrer les certificats d'i to-Unis d'Amérique.)	
	Titre officiel s	
	Lo Minist	re de l'Agriculture :

GERMANY (FEDERAL REPUBLIC)

Ausländisches amtliches Fleischuntersuchungs-Zertifikat No. 1351

(Stadi)	(Lend)	TO 61 TO 617 + + 0 To + 1 44
Die Tiere wurden einer a sind fehierfrei, gesund, be mittel, Farben oder sonsti	mtlichen Schlac ekömmlich und ge Substanzen, n meinem Besit	ene Fleisch und Fleischprodukt vom Rind, Schaf, Schwintvieh- und Fleischbeschau unterzogen. Das Fleisch un für den menschlichen Genuß geelgnet. Sie enthalten die laut Verfügung der Fleischbeschausbteilung des amstellet, verboten sind. Das Fleisch und die Fleischprodukt reden.	nd die Fleischprodukte kelne Konservierungs- erlkanischen Landwirt-
Art des Produkte	es .	Zahl der Stücke oder Kolli	Gewicht

100			
or	g1+1++++++++++++++++++++++++++++++++++	**************************************	
Identifizierungsmarkierung auf dem Fleisch und den i			201
	Verfrachter		
STUDY I	Adresse		
1000	Empfänger		
E A A A	Bestimmungso	the second control of the second seco	
	Versandmarkie	rungen	
	(Unterschrift)		
W HILL	Contensements	(Neme des Beemten der eussändischen Regierung, der berechtigt ist, Untersuchungszertifikete euszufertigen für Fleisch und Fleischprodukte, die für den Export nech den USA bestimmt sind.)	Dienstsiegei des mit der Uberwechung beeuftreg- ten beamteten Tierarztes.
	(Amtlicher Tit	a	
Druck: E. Trapp, Boss			
	GER	MANY (FEDERAL REPUBLIC)	
(Par.	27.6(f)	of the Meat Inspection Regulation	ons)
•			
		-Zertifikat für Schweinefleisch und Schwein , die Muskelgewebe des Schweins entheiten und die im elig	
(rur den versend nech den	OSV AND MELEI	Kochen verzehrt werden)	N• 0676
Ort		Datum	•••
Ich beschelnige, daß die Muskelgewebe des Schwe	Ware, die unt ines enthält. Di itur von höchste chbeschauabteilt	en angeführt ist, im allgemeinen ohne vorheriges Koc e Ware wurde in frischem oder frischgepökeitem Zusta ens 5°F ausgesetzt oder in Übereinstimmung mit einer ing behandelt. Diese Ware enthält keine Schweinein	Anweisung des Leiters
Art des Produkte	es .	Zahl der Stücke oder Kolli	Gewicht
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		A CONTRACTOR OF THE CONTRACTOR	
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Identifizierungsmarkierun auf dem Fleisch und den	-		n me espas espas espas espain espain espain espain de la metro company de la metro company de la metro company
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G A A SI	Bestimmungso	ert	
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1. 80	(Unterschrift)	man	
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	(Amtlicher Ti	tel)	
	Anmerkungs Ob Produkten best (z.B. Cervelatwu	iges Zertifikat wird für jede Konsignelion verlengt, die eus eht, die gewöhnlich ohne vorheriges Kochen verzehrt werden erst, Italieniecher oder Westfälischer Schinken und dergi.) und die proprieser	
Druck: H. Trepp, Bonn	Schweinemuske Oder dessen Age USA übergeben	uten del Lietzcupescuprantatione em outerapertungen.	

HONDURAS



SECRETARIA DE ESTADO EN EL DESPACHO DE AGRICULTURA REPUBLICA DE HONDURAS, C. A.

SERVICIO VETERINARIO DEL ESTADO

Date

which received ante-mortem neat and meat food products to been treated with and do ay the Meat and Canned Forn this country. Se certifica por el prenales que recibieron inspecció arne y producto comestible do tratados ni contienen ningú	t the meat or meat food products herein described and post-mortem veterinary inspection at the time of are sound, healthful, wholesome and otherwise fit not contain any preservative, coloring matter, or otherwise Decree and Regulations, and have been handled esente, que la carne o producto comestible de carne activity of the veterinaria ante-mortem y post-mortem al tiempo de carne son bucnos, sanos y apropiados para el consultante preservativo; sustancias colorantes u otras sustancia industrialización Sanitaria de la Carne; y que han side	of slaughter, and that said for human food, and have the substance not permitted only in a sanitary manned descrite, derivan de and de sacrificarse; y que dich mo humano; y que no han si as prohibidas por el Acuerd
KIND OF PRODUCT	NUMBER OF PIECES OR PACKAGES (NUMBERO DE PIEZAS O BULTON)	WEIGHT (PESO)
dentification Marks on Meats Marcas de Identificación de la	cand Packages	
teamer S. SVapor)		taphonisip t a she's or antibina gaga out are a process rights named advantation or a considerary
onsignor Embarcador)	Address: (Dirección)	ydd y g w g w g w g w g w g w g w g w g w g
Consignee	(Destino)	
	Veterinary Authorized by th (Veterinario Autorizado por le	e Secretary of Agriculture a Secretaria de Agricultura

ICELAND



EREBY vertify that the meat and meat food-products hereunder described was derived from animal nites and post-mortem veterinary inspection at the time of slaugther and found to be free from disease very way for human consumption, and that they have not been treated with chemical preservatives	nais subjec
EREBY vertify that the meat and meat food-products hereunder described were derived from anim	nais subjec
EREBY vertify that the meat and meat food products hereunder described were derived from anim	nais subjec
EREBY vertify that the meat and meat food-products hereunder described were derived from animales and post-mortem veterinary inspection at the time of slangther and found to be free from disease very way for human consumption, and that it has not been treated with chemical preservatives	rais subject
nte- and post-mortem reterinary inspection at the time of slangther and found to be free from disease it has not per from human consumption, and that they have not been treated with chemical preservatives	e and suite
very may for human consumption, and that they have not been treated with chemical preservatives	
	or other
substances injurious to health.	
Kind of product Number Brand Where slaughtered Consignor C.	onsignee
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DEPARTMENT OF AGRICULTURE, IRELAND.

Meat Inspection Certificate

Place		Ireland. Date	•••••			
I hereby certify that the meat and meat food products described below were derived from cattle, sheep or swine, which received ante-mortem and post-mortem veterinary inspections at the time of slaughter and are sound, healthful, wholesome and otherwise fit for human food and have not been treated with and do not contain any prohibited preservative or colouring matter and that the meat and meat food products have been handled only in a sanitary manner in this country.						
Kind of Pro	oduct	Number of Pieces or Packages	Weight			
			•••••			

Date of Shipment	•					
Consignor:		*****				
Address:	• • · • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •				
Consignee :		•••••				
Address:	••••••					
Shipping Marks		• • • • • • • • • • • • • • • • • • • •				
Identification Mark	(8 :	OFFICIAL	INSPECTION STAMP.			
(Signatur	e)		M.R.C.V.Ś.			
Official T	itle	Th				
(\$331) 1413 We1413 DGR1A	5.000 11.59 W.D	Department of Ag	riculture.			

(\$331)1413.Wt1413.DGR16, 5,000, 11-52, F.P.—G21.

ITALY

REPUBBLICA DITALIANA

Technological distribution and Sological and



ALTO COMMISSARIATO PER L'IGIENE E LA SANITÀ PUBBLICA SERVIZIO VETERINARIO

Primes to a temperatural and all decides and an extendion and deficiency and an extendion of the contract of t	Si certifice che la cerne e i prodotti di cerne a fiance indicati spi
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**************************************	a directi a (1)
# 1 - 4 - 4 - 4 - 4 - 4 - 4 - 4 - 4 - 4 -	provengene da animali che, a norma delle disposizioni vigenti nella Repubb
• agreement over a 400 agreement over a 200 agreeme	sciuti sani; si certifica inoltre che la carne e i prodotti di carne suddatti
######################################	sani e utti al consumo.
	IL VETERINARIO GOVERNATIVO DI CONFINE O DI PORTO ANT UMBAN

ITALY

(Par. 27.6 (f) of the Meat Inspection Regulations)

Moo. 25 440

N. d'ordins

REPUBBLICA ITALIANA

ALTO COMMISSARIATO PER L'IGIENE E LA SANITA' PUBBLICA

SERVIZIO VETERINARIO

Certificato complementare per la esportazione negli Stati Uniti d'America delle carai e prodotti di carai suine contenenti tessuto muscolare, preparati secondo le abituali regole per essere consumati senza cottura.

Il sottoscritto dichiara che il prodotto od i prodotti qui sotto specificati sono stati

•	e, allo stato fresco, o dopo recento sal periore a 5 gradi Fahrenheit per non	
Qualità dei prodotti	Num. dei pezzi e dei colli	Peso
	The control of the co	
	vposto sulle carni o sugli imballaggi	
Speditore	Indirizzo). Deployable designation and relative time of the control with the control research
Destinatario	Destinazione	a g - Court - Product - Little
Luogo e data di rilascio del	certificato	FAMA D T E D- AND D SE OND, MINISTER FEE
Molio dell'Aiso Commissariato per l'Igreso e la Sanità Pubblica	eterinario governativo di confine o d	ii porto Belle dell'Officie Voterinarie

MADAGASCAR

(Face of certificate)

REPUBLIQUE FRANCAISE



GOUVERNEMENT GENERAL DE MADAGASCAR ET DEPENDANCES

Service Vétérolaire, des Haran et de l'Elevage

CERTIFICAT SANITAIRE

pour l'exportation de denrées ailmentaires aux Etats-Unis d'Amérique

Viandes et dérivés comestibles

Je soussignén)
atteste, par le présent certificat, que l'expédition de viandes ou
dérivés comestibles, dont le détail est indique au verso, provient
d'animaux soumis à l'inspection sanitaire du vétérinaire du Gou-
vernement de la Colonie avant et après abatage, et que ces viandes
ou dérivés ont été trailés selon les prescriptions sanitaires édictées
par les textes en vigueur à Madagascar et Dépendances.

Il est certifié également que ces produits sont propres à la consommation; qu'ils ne contiennent aucun antiscptique, aucune matière colorante, aucune substance prohibée par la réglementation de l'inspection des viandes du Département de l'Agriculture des Etats-Unis; qu'aucun de ces ingrédients n'a servi à leur préparation.

٨,	le193_@
Signature du	Vitirinaire Inspecieur,

MADAGASCAR

(Reverse side)

MARQUES D'IDENTIFICATION

sur les viandes ou colis de produits

Exportateur ⁽¹⁾		- Miner - Gar - Ga - Ga
Origine th		
Vapeur [©]	Compagnie de Navigation	
Destination 10		
	·	
Marques du Chargement	4)	
	Signotare da Vittirinaire înspecteur.	193 . •
	t an in selliminate do to somblemen	
Vétérinaire Inspecteur.		a
Лого от голории по	In Christia in province,	
60		

The Marie of County of Spanish County of the County of Spanish Cou

Forma Num. 21

Certificado

REPUBLICA MEXICANA SECRETARIA DE AGRICULTURA Y GANADERIA

DIRECCION GENERAL DE GANADERIA

EXPORTACION A:	
CERTI	FICADO
DE INSPECCION DE CARNE I COMES	DE CERDO Y SUS DERIVADOS TIBLES
(LUGAR)	(FECHA)
Se certifica que el producto o producto certificado están preparados en la forma us miento y contienen carne de cerdo, la cual, ción se sujetó a una temperatura no más al do no menor de 20 días, o bien fueron tra de la División de la Inspección Sanitaria o contienen carne de cerdo que haya sido tratad riormente.	cuando fresca o durante el proceso de cura- ta de menos 15° C. (5° F.), durate un perío- atados de acuerdo con lo prescrito por el Jefe de la Carne; certificándose también que no
MARCAS DE IDENTIFICACION	EN LAS CARNES O BULTOS
Nombre del Establecimiento T.I.F. Productor:	Vía:
Número de Registro:	Destino:
Remitente:	Consignatario:
Procedencia:	Marcas de Embarque:
Detalle del Cargamento:	
(Firma del Funcionario Federal autorizado)	(Sello de la Direc, Gral. de Ganadería)

MANUAL OF INSPECTION PROCEDURES

THE NETHERLANDS

Seria A A



KINGDOM OF THE NETHERLANDS MINISTRY OF AGRICULTURE, FISHERIES AND FOOD VETERINARY SERVICES.

OFFICIAL ME	AT INSPECTION CERTIFICATE OF COUNTRY OF SLAUGHTER.
awine or goals which and that such mest and have not been permitted by the reg	hat the maat and meat food products herein described were derived from cattle, sheep, the received ante-mortam and post-mortem veterinary inspection at the time of alaughter and meat food products are sound, healthful, wholesoms and atherwise fit for human food treated with, and do not contain any preservative, colouring matter, or other substance not ulations governing the meat inspection of the United States Departement of Agriculture, filed id meat and meat food products have been handled only in a sanitary manner in this country.
Kind of product: .	Number of pieces and packages: Weight:
Idantification marks	on meats and packages:
Consignor:	
Address:	
Consignas:	
Destination:	
Shipping marks:	
	Signature
	VETERINARY OFFICER AUTHORIZED BY THE MINISTRY OF AGRICULTURE, FOOD AND FISHERIES
Serie A	
	KINGDOM OF THE NETHERLANDS
	MINISTRY OF ACRICULTURE, FISHERIES AND FOOD
	VETERINARY ŠERVICES.
(F	AT-INSPECTION CERTIFICATE FOR PORK AND PORK PRODUCTS or shipment to the United States of articles of a kind preparad customily to be eaten without cooking, which contain muscla tissue of pork.) Date:
I haveby certify the without cooking, subjected to a term transfed as specifications of pork white	hat the article or articles herein described are of a kind prepared customsrily to be estentiand contain muscle tissue of pork which, when fresh or freshly cured in salt, ware sperature not higher than five (5) degree F. for not less than tweory (20) days or otherwised by the Chief of the Meat Inspection Division, and that said articles contain no muscle than not been treated as herein specified.
	Number of pieces and packages: Weight:
	ts on meats and packages:
Shipping marks:	

VETERINARY OFFICER AUTHORIZED BY THE MINISTRY OF AGRICULTURE, FOOD AND FISHERIES,

NEW ZEALAND

	OFFICIAL MEAT — INSPECTION CERTIFICATE	E de la	Kind of Product. Of Parcels. Mark. Where slaughtered. Consignor. Consigne.	Signature: Veterinary Officer, New Zealand Government.	
Ag. 196. (A.	OI	I HEREBY and post-mort human consum	Kind		

NORTHERN IRELAND



MINISTRY OF AGRICULTURE FOR NORTHERN IRELAND.

INSPECTION CERTIFICATE

for use in connection with the

EXPORT OF MEAT AND MEAT PRODUCTS

Place Date

I HEREBY CERTIFY described was/were derived to veterinary inspection at the to for human consumption, and prohibited preservative or colleged products have been handled or	from animals which receime of slaughter and ar have not been treated ouring matter, and that	e sound, wholesome and fit with and do not contain any the said meat and/or meat
Description	No. of Package	Weight
Identification Marks	••••••	•••••••••••
Name and Address of Consig	mor	
Name and Address of Consig	mee	
Conveyed by (Shipping Marks	s)	
	SignatureC	ertifying Officer.
	Official Title	••••••
Constant		
Secretary, Ministry of A	Agriculture.	

NORWAY



KINGDOM OF NORWAY MINISTRY OF AGRICULTURE - VETERINARY DIRECTORATE

Foreign official meat inspection certificate.

Place: (Avendured)	Norwa (Norga)	7	Date: (Date)
I hereby certify that the meet on goats which received ants-and post mortes food products are sound, healthful, wholeso contain, any preservative, coloring matter, of the United States Department of Agric senitary manner in this country.	m veterinary inspections at the tim me and otherwise fit for human for or other substance not permitted b	o of claughter, and that od, and have not been to y the regulations governi	seatch ment and meet ented with, and do not ag the ment inspection
(Ing attentions harmed at nedember novate hights elabilingum og er fumert tjenlig till fielhemat, at de fild efter det amerikanske Landbrykelepartemanne flattette i h Temperur med regler fortests for elik kjetthemireli)	n or babaselist med eller tanabelder one bess	erveringsmiddel, forge eller and	en staffer som like er tillett
Kind of product: (Variety)			
Number of pieces or packages: (Antall hells)	Gross weight: (Brattovakt)	Net weight (Nesseeds)	:
Identification marks on packages and certification-chaperthenvoluments på belli og særifikes)	Sonte:		
Consignor: (Avender)			
Address: (Advass)			
Consignee: (Mettaker)			
Destination: (Postempolement)			
Shipping marks:			
(Avianderon Sultumrio)			
	Signat	ure:	
	of Agr	nary inspector authorized iculture. Swarings swarlast ex Landh	

R.w. 3-12

PARAGUAY

N. 复潮。

D. G. N. 2

TO BE A PROPERTY OF THE PARTY O

MINISTERIO DE ECONOMIA



DIRECCIÓN DE GANADERÍA

CERTIFICADO OFICIAL DE INSPECCION DE CARNES

Derivados Comestibles

CERTIFICO que la carne y demás productos alimenticios de crigen animal que se indican a continuación, provienen de bovinos que recibieron inspección Veterinaria ante y post mortem al ser sacrificados, y que dicha carne y demás productos alimenticios de origen animal son sanos, arlabres y en toda forma aptos para alimentación humana, no habiendo sido tratados ni conteniendo preservativo alguno, materias colorantes y otras substancias no permitidas por las disposiciones de la Dirección de Ganadería, que rigen la inspección de carnes y demás productos de origen animal, y han sido elaborados en este país en condiciones sanitarias.

CLASE DE PRODUCTOS	NUMERO DE PIEZAS	PESO KILOS		
	NOMERO DE LIEZAS	BRUTO	NETO	
Sellos de identificación de				
Dirección:	Consignatario:			
	Destino:			
	Marcae:	nord discription above other soon or other soon page 1, 100 or 10		
	Fecha:			
V•. B				
Dr Director Gener	al de Genacierie	Dr inspector de s	S. Veterinario	

Successive to the successive and suc



POLSKA RZECZPOSPOLITA LUDOWA MINISTERSTWO ROLNICTWA

CENTRALNY ZARZĄD WETERYNARII

URZĘDOWE ŚWIADECTWO BADANIA MIĘSA WIEPRZOWEGO I PRZETWORÓW WIEPRZOWYCH

(Na przesyłki morskie do U.S.A. artykułów przyrządzonych do spożycia bez gotowania a zawierających wieprzowine)

NT	
Miejscowość	Data
Zaświadczam niniejszym, że artykuł lub artykuły i zawierają tkanki mięsne wieprzowiny, które w stanie św poddane działaniu temperatury nie wyższej niż 5°F (pięt były poddane jednemu z innych sposobów postępowania, Mięsnej, jako też, że wymienione artykuły nie zawierają były poddane postępowaniu wymienionemu w niniejszym	 f) przez czas nie krótszy od dwadzieścia (20) dni lub wyszczególnionych przez Szefa Wydziału Inspekcji żadnych wieprzowych tkanek mięsnych, które nie
Rodzaj przetworów	Ilość sztuk lub paczek (skrzyń)
Waga	Znaki rozpoznawcze na przetworach mię-
	snych lub paczkach
Nadawca	Adres
Odbiorca	Miejsce przeznaczenia
Znaki transportowe	
U W A A: Świadectwo powyższej treści musi być dolaczone do każdej przesylki artykulów żywności przeznaczonych do spożycia bez gotowania (np. letnia kielbasa, włoska i westfalska szynka itp.), które zawierają jakieś tkanki mięsne wieprzowe.	Podpis (Nazwisko urzędnika upoważnionego do wystawie- nia świadectw budania mięsa i przetworów mię- snych wywożonych do U.S.A)
Odbiorca lub jego agent winien świadectwo niniejsze doręczyć Inspektorowi Wydziału Inspekcji Mięsnej w miejscu badania w USA.	Tytuł urzędowy

SCOTLAND



SCOTLAND.

DEPARTMENT OF HEALTH FOR SCOTLAND.

CERTIFICATE for use in connection with export of meat and meat products.

Date.

I hereby certify that the meat a derived from animals which receiv the time of slaughter and are some and have not been treated with a colouring matter and that the said in a sanitary manner in this country	ed ante and post morte nd and wholesome and a and do not contain any meat and/or meat produ	m veterinary inspection at fit for human consumption, prohibited preservative or
Description.	No. of Package.	Weight.
Identification Marks		
Name and Address of Consignor		
Name and Address of Consignee	anniana ne anniana ann	
Conveyed by (Shipping Marks)		
	Signature (Rank or Title)	Certifying Officer
Secretary, Department of Health for Scotland.		

Place.....

SCOTLAND

(Par. 27.6 (f) of the Meat Inspection Regulations)



SCOTLAND.

DEPARTMENT OF HEALTH FOR SCOTLAND.

CERTIFICATE for use in connection with export to the UNITED STATES OF AMERICA of articles of a kind prepared customarily to be cated without cooking, which contain muscle tissue of pork.

I hereby certify that the article or articles herein described are of a kind prepared customarily to be eaten without cooking, and contain muscle tissue of pork, which when fresh or freshly cured in salt, were subjected to a temperature not higher than 5°F., for not less than 20 days, or otherwise treated as specified by the Chief of the Bureau of Animal Industry of the United States of America and that said article or articles contain no muscle tissue of pork which has not been treated as herein specified.

Description	No. of Package	Weight.
Identification Marks	***************************************	**************************************
Name and Address of Consignor	a conspir de sin e e e e e e e e e e e e e e e e e e e	***********************************
Name and Address of Consignee	• 4 * * • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •
Conveyed by (Shipping Marks)	house as an army material deposits on the co	• •
	Signature C(Rank or Title)	Certifying (More)

NOTE—A certificate in the above form is required to accompany each consignment of any mest or product of a kind prepared customarily to be eaten without cooking (such as summer sausage, "Italian" and "Westphalia" hams, and the like), which contains any muscle these of park. This certificate is to delivered by the consignee, or his agent, to the inspector of the Department of Agriculture at the point of inspection in the United States.

CRED WIL CHILDREN 250 2/12 J. A.T. E. 1244

Secretary.

Department of Health for Sections.

SPAIN



MINISTERIO DE LA GOBERNACION DIRECCION GENERAL DE SANIDAD



SERVICIOS DE SANIDAD VETERINARIA

Documento sanitario para la exportación de productos alimenticios de origen animal con destino a los Estados Unidos			
Neción	Provincio	Municipio	
proceden de reses qu Mataderos Oficiales ciones de salubridad gan sustancias prese la inspección cárnica	certifico que la carne y los producto e fueron objeto de inspección veter autorizados y que dicha carne y pr , siendo aptos para el consumo hun rvativas, colorantes o alguna otra , de los Estados Unidos, Departam s han sido tratados en este país úni	rinaria antes y después de a roductos cárnicos se hallan aano, sin que hayan sido tr prohibida por las disposic ento de Agricultura, y que	ru sacrificio en los en buenas condi- atados ni conten- iones que regulan dicha carne y pro-
CLAS	E DE LA MERCANCIA	PIEZAS O NÚMERO DE PAQUETES	P E \$-0
Remitente			
Domicilio		ab e quadqueq angge « Gallabo-rord o quaddidaggia a co-dear roca ao que acultanta e capitaquisidaq a es es a tagen	
Consignatorio			
Destino Marcas de identifica	ción sobre carnes y paquetes		
Marcas de facturaci	ón		
*	***************************************		
	V.• 8.•	EL VETERINÁRIO Ö	MCIAL,

V.º 8.º EL VETERINARIO DE SANIDAD EXTERIOR,

SWEDEN

Form. C.

Veterinärintyg för köttexport. Kingdom of Sweden.

The Royal Veterinary Board of Sweden.



Foreign official meat-inspection certificate.

Place (avsåndningsort)

Data (datum och år)

'I hereby certify that the ment or meat food products herein described were derived from animals (cattle, sheep, swine, goats) which received ante-mortem and post-mortem veterinary inspections at the time of slaughter, and that such meat and meat food products are sound, healthful, wholesome and otherwise fit for human food, and have not been treated with, and do not contain, any preservative, coloring matter or other substance not permitted by the regulations governing the meat inspection of the United States Departement of Agriculture, filed with me, and that said meat and meat food products have been handled only in a sanitary manner in this country.

Undertecknad intygar härmed att nedan angivna köttvaror härröra från djur (nötkreatur, får, svin, get), vilka undergått veterinärbesiktning omedelbart före och omedelbart efter slakten, att desamma äro tjänliga till människoföda, att de icke hava behandlats med eller innehålla förbjudna konserverlingsmedel, färg- eller andra ämnen, som icke
äro tillåtna enligt amerikanska jordbruksdepartementets bestämmelser rörande köttkontroll, samt att desamma här i landet hava behandlats på ett i sanitärt avseende tillfredsställande sätt.

Kind- of product. (Varuslag)	Number of pieces or packages. (Aniat kolly)	Welght. (Vikt)
Stageoomstrik m. Naard is an amerikaan amerika	9 - 9 - 9 - 9 - 9 - 9 - 9 - 9 - 9 - 9 -	640 F0 004 0 6 F 8 april 000 ba ap a 640 6000 659 64 F0 000 bb ap
	Garage 8, 000-7010 - 21 8 1972898888	0+0-10+-100+0_000+0_000+00+00+00+00+00+00+00+00+0
To the state of the most polygon population and the state of the succession medical property of the services o	g.s., ***********************************	\$+\$ - +\$ - +\$ - +\$ - 40 400 0 000 0 - +\$ - 000 0 0 000 0 0 000 0 000 0 0 000 0 0 0
Identification marks on meats and path kett aller embellage sobrages veterings kontrolled	ckages	
Consignor	Adress . :	-0 0 000- a-00 a0+ 000a0+ +=000qqqap4q+4
Consignee (Mottagare)	Destination	s au eo - solidad a nó ha neustriassonas na ministração a sua esta opção da
Shipping marks		



SWEDEN

(Par. 27.6 (f) of the Meat Inspection Regulations)

Form D.

Veterinärintyg för köttexport.

KINGDOM OF SWEDEN

The Royal Veterinary Board of Sweden.



Official Meat-inspection certificate for pork and porkproducts.

(For Shipment to United States of articles of a kind prepared customarily to be eaten without cooking, which contain muscle tissue of pork).

Place (eviladaingsort)

..... Sweden
Country Dute (datum och år)

19

I hereby certify that the article or articles herein described are of a kind prepared customarily to be eaten without cooking, and contain muscle tissue of pork which, when fresh or freshly cured in salt, were subjected to a temperature not higher than 5°F. for not less than 20 days, or otherwise treated as specified by the Chief of the Bureau of Animal Industry, and that said articles contain no muscle tissue of pork which has not been treated as herein specified.

Undertecknad intygar härmed att nedan angivna köttvaror beretts på sådant sätt att de kunna förtäras utan föregående kokning, att de innehålla kött (muskelvävnad) av svin, som i färskt eller lätt saltat skick förvarats under minst 20 dygn vid temperatur av högst 5°F. (-15°C.) eller behandlats på annat sätt i enlighet med av Bureau of Animal Industry givna föreskrifter samt att köttvarorna icke innehålla kött (muskulatur) av svin, som icke behandlats i enlighet med här angivna bestämmelser.

Kind of product.
(Varuslag)

Number of pieces or packages.
(Antal kolly)

Weight.

Identification marks on meats and packages (A hou other ambellage appraga vererialte hontrolleatches)

Consignor

Adress

Consignee (Mettagers)

Destination (Adressor)

Shipping marks

Signature)

Veterinary inspector authorized by the Royal Veterinary Board or Swedon.

URUGUAY

204, 13-73



Corrasp onde a un sellado de elincuenta eta. (\$ 0.50)

No.

REPUBLICA ORIENTAL DEL URUGUAY MINISTERIO DE GANADERIA Y AGRICULTURA DIRECCION DE GANADERIA Sección: INDUSTRIA ANIMAL

Certificado Oficial de Inspección de Carnes (PARA ENVIO DIRECTO A

Montevideo,			N
Cartilico que la carno y demés producto racibiaron inapsoción vaterinaria ante-mortem y selubras y en toda forma aploa para alimentac no permitidaa por las disposiciones del Oeparto carnos y damás productos da origan animat ha	post-mortem al ser escrificados, y c ión humans, no habiendo sido tratad imento de Agricultura do	os ni contaniendo preservativo alguno, mataria que rigan ta inepacció	a da origen animal, aon eanos, e colorantea u otrae eubstancies
CLASE DE	P R O D U C T O	No. DE PIEZAS	PESO
•			
Chservacionas:		······································	***************************************
	·		
Satto da identificación da les carnes y piezas:			
Romitente		Oirección '	
Consignatario		Deatino	
Marca da Embarqua		Vapor	
,			
Firme:	***************************************	Firma:	· · · · · · · · · · · · · · · · · · ·
Titulo Oficial:		Travia Oficiel:	

		máa productoa alimenticios da origan animal	
gamente de un conductor e otro en el Iranscul		e, ain dascargar en ningún otro pafa, con axo por al consignalario o au agonta at Inepector	
en el ponto de inspección de			· · · · · · · · · · · · · · · · · · ·
El cargador de la consignación debará auminiel	rar la eiguiente información:		
Cargado al día	en	a bordo de	
Y si hubiara descargado an cualquier punto cos	an antarioridad a la llegada a	por	
Descargado al día	a bordo de	por	
a constant of the		•	

firms del aposto o emplosebo del curgodor }

27.18 Certificates in the English language and exact form prescribed by section 27.6 (a) of the Meat Inspection Regulations are acceptable to cover the importation of meat and meat food products from the countries listed hereafter when signed by authorized officials of the countries whose names and signatures have been approved and published:

Luxemburg Switzerland Venezuela

The names and facsimile signatures of such foreign officials follow:

Country and name	Signature
Luxemburg Edouard Loutsch	Bernhof
Marcel Theisen	· Mein
Emile Schummer	McChmmey
Switzerland G. Flückiger	G. Lushigu
Paul Kāppeli	- marrie
Venezuela	
Edward Morgan	Edward Morgan.

27.19 In some cases involving breach of custom bond for failure to comply with Meat Inspection Branch requirements in the importation of foreign meat or meat food product, local collectors of customs are authorized to assess a money penalty less than the full liquidated damages after having come to an agreement with the local inspector in charge of the Meat Inspection Branch. The inspector in charge should not make any recommendations on the assessment in lieu of liquidation. He should communicate with the Washington office, Meat Inspection Branch, giving full particulars involving the mishandling and advice will be furnished concerning the amount of money penalty or whether full liquidated damages should be recommended.

PART 28—DEFINITIONS AND STANDARDS OF IDENTITY

28.1 The following quoted memorandum clearly indicates the position of the Food and Drug Administration in regard to oleomargarine factories operating under our

inspection:

"The Meat Inspection Division maintains inspection under the Meat Inspection Act in establishments manufacturing oleomargarine using animal fats in whole or in part as an ingredient of oleomargarine if interstate movement is contemplated. This inspection deals with sanitation of the factory and wholesomeness of all raw materials and accuracy of labeling. The Meat Inspection Division inspector exercises supervision over the processing, during the time that the factory is operating on animal fats and at other times so far as general sanitary conditions go. During periods when vegetable oleomargarine only is being produced there is no processing inspection in the factory by the Meat Inspection Division.

"If the oleomargarine plant while operating exclusively on vegetable product becomes a nuisance and likely to contaminate the meat packing establishment, the Meat Inspection Division takes such action as will bring about correction of the unsatisfactory condition.

"It is unnecessary for Food and Drug to make inspection of oleomargarine factories during periods of time while Meat Inspection Division inspectors are in the plant even though both vegetable and animal oleomargarine are being produced at the same time. Inspection should be made by Food and Drug if there are extended periods of time during which the plant is operating only on vegetable oils and Meat Inspection Division inspectors are not continuously present.

"During your routine coverage of oleomargarine factories, contact the supervisor of Meat Inspection Division in each factory operating under Meat Inspection Division inspection. A mutually agreeable plan should be developed with him which will insure adequate coverage of sanitation of oleomargarine operations of the factory by Meat Inspection Division or Food and Drug Administration or both, with the former supervising the preparation of oleomargarine containing animal fat and the latter being responsible for oleomargarine composed exclusively of vegetable fats or oils."

PART 29—INSPECTION AND HANDLING OF HORSE MEAT AND PRODUCTS THEREOF

29.1 The reference to equine meat used in the Horse Meat Act has been interpreted to apply to horses and is

not extended to mules, burros, and the like.

Although it is clear that horse meat may not be prepared or handled in any establishments in which cattle, sheep, swine, or goats are slaughtered or product thereof prepared or handled, establishments operating under our horse meat inspection are permitted to receive into such establishments federally inspected meat or meat byproducts derived from cattle, sheep, swine, or goats for the purpose of using such product with horse meat or horse meat product in the preparation of pet food. It must be clearly understood, however, that product derived from cattle, sheep, swine, and goats if not used in the preparation of pet food may not be distributed from the horse meat establishment except in the original closed packages in which they were received. This will prohibit the shipment from a horse meat establishment of unpackaged carcasses, quarters, and wholesale cuts derived from cattle, sheep, swine, and goats.

29.3 It has been found very convenient to have an elevated walkway around the horse pens so that animals can readily be observed from a dorsal aspect which easily brings into focus two often affected parts of the horse,

namely, poll and withers.

29.4 Sections 9.6 and 9.9 of the regulations pertain to

any and all animals showing symptoms or affected with anthrax, rabies, tetanus, parturient paresis, and railroad sickness.

29.5 It is important to report the identity of animals found on ante mortem or post mortem examination to be affected with contagious and communicable diseases—by rapid means of communication if the circumstances warrant—or on the usual Form ADE 2–11C.

29.6 Horse livers condemned on post mortem inspec-

tion need not be reported.

29.7 Carcasses of horses which have been subjected to hyper-immunizing procedures against such human pathogenic micro-organisms as meningococci and streptococci should not be passed for human consumption since these organisms may still be present and viable in the body for varying periods after the final injection of the cultures. Moreover, horses so treated should not be slaughtered for animal food because of the danger of contaminating humans who handle the carcasses or parts of the animals.

29.8 Horses used for the production of gas gangrene, tetanus, or diptheria antitoxins, although not subject to inoculation with living pathogenic bacteria, are nevertheless considered unsuitable for slaughter for human food. The toxins injected into these animals are very

powerful and noxious.

29.9 Various methods are employed to kill horses. Some methods result in the contamination of the head and adjacent cervical tissues. A careful inspection shall be made of these parts and any contaminated portions must be disposed of according to the findings.

29.10 It is necessary to remove sufficient dorsal bones of the head (frontal, nasal) to expose for inspection the nasal septum and turbinate bones with the adjacent mu-

cous membrane.

29.11 Deposits of melanin are often found in the axillary and medial scapular regions of white or light gray horses. Therefore, it is necessary to expose these areas in white or light gray horses as part of the routine post mortem inspection. When examinations disclose melanin in these parts, the inspection should extend to the ribs and costal muscles. This does not imply that other horses are not similarly affected because such lesions have been found in dark colored horses.

29.12 A careful examination must be made of the

atlantal and supraspinous bursa and surrounding structures in all horse carcasses since these areas are common seats of infections.

- 29.13 The regular $2\frac{1}{2}$ -inch rubber brand may be used to apply the inspection legend and establishment number on the outer cloth covering of horse meat or horse meat product. However, this does not relieve the requirement that such covering bear plainly and conspicuously the inscription "horse meat" or "horse meat product," whichever is applicable. The words "horse meat" or "horse meat product" should be placed in close proximity to the imprint of the $2\frac{1}{2}$ -inch rubber brand wherever it appears on the covering.
- A reading of the Federal Horse Meat Act indi-29.14 cates that it was the intention that horse meat or horse meat product be plainly and conspicuously labeled, marked, branded, or tagged "Horse Meat" or "Horse Meat Product," as the case may be, if interstate movement is involved. This means that all horse meat or horse meat product leaving an official establishment must be so identified. Likely, the intent of the law and regulations is being properly carried out at your station, but we feel that emphasizing its importance is in order. Even though horse meat in chunks or larger pieces or horse meat product is packed in properly marked barrels or other large shipping containers, such horse meat or horse meat product should bear the markings as required by the act and regulations, applied either by the official brand or other approved means. An exception may be made on inspected and passed horse meat which moves from one official establishment to another under seal.
- 29.15 A study of various methods used and investigation with a number of different formulas of green ink gave information which should be helpful in obtaining permanent legible marks of inspection on horse meat. The area where the brand is to be applied must be free of surface water. This may be accomplished by using a scraping device attached to the handle of the brand or allowing the carcass to hang for a short time before branding. Experience with hot ink brands did not indicate that this type of brand produced a more acceptable mark on the carcasses than cold ink brands. However, on boneless horse meat, such as horse tenderloins, the hot ink brand produced a more acceptable mark. The formula for

the green ink which gave the most satisfactory results is furnished below:

	Percent
F D & C Green No. 3 (fast green FCF)	$3\frac{1}{2}$
Dextrose (corn sugar)	. 3
Water	. 16
Edible shellac	. 2
95 percent ethyl alcohol	. 75

29.16 In addition to the green domestic meat label for horse meat or horse meat food products, the words "Horse Meat" or "Horse Meat Product," as the case may be, should be stenciled in letters at least one inch in height on the barrels or other large shipping containers. Such markings on burlap, paper, or other similar barrel covers are not sufficient.

INDEX

	Section	n Page
Accidents, prevention	7.5	19
Acid cleaners, use in removing corrosion 8.3	(a) (3)	22
Administrative Office, Washington 3.2	(a) (2)	4.
Alaska Railroad, examination of food articles for	22.7 (a)	122
Alaska Road Commission, examination of food ar-		
ticles for	22.7 (a)	122
Albumin from inedible material, not approved	18.28	99
Aluminum, staining of product		36
Animal, definition	1.1	1
Animal Disease Eradication Branch:	1.1	•
cleaning and disinfection of vehicles	22.13	128
report of brucellosis reactors	11.8	60
"Animal fat" and "Meat fat", use of terms	17.52	91
Animal food, interstate transportation	25.17	136
Animal Foods Inspection Section, Washington of-	20.11	100
face 29	(0) (2)	4
fice	(a) (b)	4
Consider settle reports	22.12	128
Canadian cattle, reports	9.8	42
hyperimmune swine inspected by	_	
reporting reactors to	9.3	41
Animals:	0.0	41
ante mortem inspection	9.2	41
carelessness in handling	9.6	41
casings. See Casings.	0.0	40
emergency slaughter		42
listerellosis or listeriosis, symptoms	9.11	42
other than cattle, sheep, swine, or goats	2.2	1
rifle or pistol used for stunning 10.11		46
scrapie, symptoms	9.12	43
Ante-mortem inspection:	0.4.0.4.0	4.0
detailed requirements for	9.1 - 9.13	40
pens, equipment, and help furnished by estab-	_	
lishment		
Appeals	21.1	119
Applications:		_
inspection		10, 12
certificates of exemption 4.2, 4.3	4.4, 4.7	10,11,12
import product inspection	27.5	143
import product inspection		
dition	8.21	38
Area directors:		
inspectors in charge responsible to	3.3	6
•		

	Sectio	n Page
Area directors—Continued		
report of samples18	.65 (d)	112
responsibility	(a)(1)	4
stations under their supervision	18.69	113
Argentina, facsimile of approved certificate	27.17	149
Armed forces, smoked hams for	18.74	115
Army, grading of meats for	16.13	69
fice	(a) (4)	4
Assignments of amployees:	(a) (4)	4
changed from time to time	3.7	7
conformity with grade classification	3.6	$\dot{7}$
hours of duty	7.3	18
Atrophic rhinitis, hogs affected with	11.17	63
Australia, facsimile of approved certificate	27.17	150
Automobile, personally owned, used by inspector	6.3, 6.4	
Bacon, qualification of term	17.39	88
Badges:	2.0	1.0
official, wearing of	6.2	16
on outer clothing	3.13 (T)	34
malathion and sugar 8.5	(h) (1)	26
rodent		27
Beans, preparation of product containing	18.30	100
Beef, grinding or chopping of, regarded as pro-	20.00	200
cessing '	2.4	2
Beef heart meat, definition	17.53	91
Beef tenderloins, application of inspection legend	16.19	70
Belgium, facsimiles of approved certificates	27.17	151, 152
Bile:	140	0.0
pharmaceutical products prepared from	14.8	66
Biological Control Section:	7 11 14	50 69
specimens submitted to	(2) (5)	59, 62 5
Bled carcasses, disposition of	11.12	62
Blood, clotted, removal from hog hearts	18.25	99
Boards, cutting		36
Bone:		
crushed or ground, not to be used as ingredient	18.22	98
found in products	18.21	98
Boned pork heads, description of term	16.32	75
Boneless pork loins:	10.71	114
control during curing	18.71	114 114
treated for destruction of trichinae	18.70 2.4	2
Boning, not regarded as processing. Bouillon cubes, not regarded as meat food product.	18.86	118
Brains and tongues, sheep and lambs		88
Branch, organization of Washington office		3
Branding:		
Also see marking.		
beef tenderloins	16.19	70
calf carcasses	16.17	70
number of imprints	16.18	70

	Section	n Page
Brands:	Decen	, ii 2 tigo
aluminum handles, returned to Washington	16.3	68
control over		68
drilling hot iron brands		68
Government agencies, special		123
hide, for identifying cattle		120
imprints to be clear and legible	16.9	68
initial set furnished by Branch		67
inventory to be maintained	16.8	68
property accountability no longer maintained	16.6	68
special Navy, Marine Corps, and Coast Guard		127
uniformity in size and design		68
unserviceable or lost, replacement	16.7	65
"U. S. Passed for Cooking" and "U. S. Con-	22.8 (e)	123
"U. S. Passed for Cooking" and "U. S. Con-	100	4 10
demned"	10.6	45
Veterans Administration, Navy, Marine Corps,	000(4)	109
and Coast GuardBraunschweiger, product labeled as	22.8 (d) 17.54	123 91
Brazil, facsimile of approved certificate		153
Bread sandwiches, not regarded as meat food		100
product		117
Brucellosis reactors, reporting of		60
Brushes, fine wire, not to be used		31
Buffalo, slaughtered in official establishment	2.2	1
Buttermilk, dried, use not approved	18.27	99
Calves:		
included under cattle in definition for animal	1.1	1
requirements for post-mortem inspection	10.11 (c)	52
unborn, handling of	11.13	62
Canada:		
cattle from		
facsimiles of approved certificates		
importation of uncooked pork products	24.12	132
Canning: cured hams intended for	10.00	105
		105
date and identity on hermetically sealed glass containers		78
hams, cured		105
handling of product		116
heat processing of product 18.	76 18 78	
incubation of test samples	18.83	
net weight determination 17.	30-17.33	83-85
overfilling	18.77	116
products processed without steam pressure cook-	•	
	4000	117
repacking and reprocessing defective cans	18.81	117
temperature of sausage prior to	18.79	116
Carcasses:		
and parts passed for cooking		67
bled, disposition		
branding	10.13 (d)	
calf, skin attached		
clothed after washing, mark of inspection	16.15	70

195

	Section	Page
Carcasses—Continued	Section	1 age
condemned, reporting	. 11.3	59
condemned, tanking and denaturing 14	11_148	64
conditionally passed, cysticercus bovis		70
location and number of brand imprints		70
mutilation of, unnecessary	10.7	45
retained tagging of	0.4.10.5	44, 45
retained, tagging of) 13 (e)	58
Cartons:	,,,,,	•
	18.68	112
laboratory samples	18.27	99
Caseous lymphadenitis carcasses not eligible for		
export	24.11	132
Casings:		
acidification of approved dye solutions	18.57	105
artificial, dye-impregnated	18.58	105
flushed before stuffing	18.19	97
hog stomachs used as containers not classed as	18.16	97
inspection	18.18	97
marking of meat and product in	17.27	82
mineral or vegetable oil applied to outer sur-		
faces	18.38	101
Cattle:		
post-mortem inspection, requirements 10	0.11 (a)	46
tuberculin test	11.6	59
Cereal:		
description of term	16.33	75
mettwurst, not permitted ingredient	18.47	102
sausage, prepared with	18.45	102
thuringer or corned beef hash, not permitted in-		
gredient	18.46	102
Certificates. See Export Certificates, Import Cer-		
tificates, Shipper's Certificates		
Cheeks, untrimmed, declaration for	16.31	75
Cheese, shown in statement of ingredients	16.27	74
Chemical Control Section:		=0
samples of plastic films	17.11	78
Washington office 3.2	(a)(b)	5
Chemicals, use of for control of vermin	8.5	24
Chief, Office of, Washington 3.2	(a) (1)	91
Chili con carne, ingredients	17.53	11
Chip steaks, shipped interstate under exemption	10 04	98
Chitterlings, preparation of intestines as	18.24 17.44	88
Chopped beef, definition	17.44	00
Chopping or grinding of beef, regarded as pro-	2.4	2
cessing		
Civil Aeronautics Administration, examination of	22.7(a)	122
food articles for	22.1 (4)	122
Cleaning materials: acceptable	8.3 (a)	20
acceptable	8.3 (h)	22
not acceptable Cloths, wetting of	10.13	57
	20,20	
Coast Guard: brands	22.8 (e)	123
Dranus		

	Section	n Page
Coast Guard—Continued	99.77./-\	120
examination of food articles for		
Color penetration, examination for	18.59	105
Condemned product:	111 110	0.4
carcasses, tanking and denaturing	14.1–14.8	64
reporting	18.6	63
tanking		
Condiments, added to sausage	18.44	102
Containers:	0.10 (-)	9.4
acceptable for use animal casings		
calf rennets	10.10, 10.13	97
curing mixtures, seasonings, and the like	18.26	99
date of canning		78
deceptive filling		83
establishment number embossed on		
head space, ample		116
hermetically sealed glass	17.9, 18.4	78, 94
hog stomachs, used as	18.16	97
ingredients, statement of		
labeling		
net weight		82
product identified to show ingredients		
second hand Contamination:	0.17	31
accidental, cleaning of product	12.1	94
barrels, second hand	8.19	38
fine wire brushes or steel wool	8.10	31
fountain type brushes		
hair falling into product		38
improper labeling	17.10, 17.11	78
magnetic traps		31
meat grinders	8.24	39
metals in contact with product	18.14	97
possible sources of	8.13	32
rodents, dirt, and the like		108
used containers Contractors' bills, covering product for Navy	22 8 (f)	124
"Cooked" or "fully cooked", use of term 16.2	25 (b) 17.46	74, 89
Cooking and smoking practice, specific tested. 18	8.62 (a) (3)	106
Cooperation with local authorities		119
Corned beef hash, cereal not permitted	18.47	102
Cruelty to animals, correction of practices cor	nsti-	
tuting	9.6	41
Cured meats:	4005	77
declaration of in statement of ingredients		75
imported from countries in which foot-and-mo	27.9	144
disease or rinderpest exists		144
tein added to pickle	18.56	104
solutions injected into meat	18.49	
Curing mixtures, seasonings, and the like, ma		
ing of	18.26	99

	Sectio	n Page
Customs Service:		
breach of bond	27.19	187
reporting imported product	27.9	144
"Cutlet", use of term in conjunction with "Veal"	17.61	93
Cysticercous bovis:		
carcasses conditionally passed for food on ac-		
count of	16.16	70
Czechoslovakia:		
authentication of certificates 2	7.16 (b)	147
facsimiles of approved certificates Dead animals, requirements to bring on premises	27.17	156, 157
Definitions	1.1	1
Defrosting of product	18.5	94
Denaturing:	14 8	0.5
kerosene, denaturing oil, or fuel oil	14.5	65
oil, added to rendered animal fat		
uninspected product shipped interstate		
uninspected rendered fat shipped interstate Denmark, facsimiles of approved certificates	25.19	139
Detached alin definition	7.47 (2)	
Detached skin, definition 19 Detergents, use in official establishments 8.3	(a) (a)	89
Diseased animals:	(a) (1)	20
	99 A	120
Federal and State officials, reports	99 1	119
mucosal disease, virus diarrhea or rhinotracheitis	22.1	121
tuberculosis eradication	22.0	120
Diseased carcasses and parts, disposal of 12	1 1_11 17	58
Domestic meat label:	1.1-11.17	90
horse meat	29 16	191
replacement of detached		76
Dominican Republic, facsimile of approved certifi-		, 0
cate		160
Drawings:		
disposition, if out of date	4.10	14
paster, incorporated in new blueprints	4.12	14
project abandoned	4.13	14
remodeling or new construction	4.9	13
to be in accordance with instructions	4.14	14
yearly review	4.11	14
Dried Skim Milk:		
not acceptable with other substances		118
sausage and meat loaves, use in	18.27	
Dry salt cured, product designated as	17.40	
Due Notice, regarding shipment of product	7.1	17
Dye solutions:	10 55	105
acidification of		105
_ artificial casings	18.58	
Emergency slaughter, provisions for	. 9.9	42
Employees:	31(0)	2
appointment	2 91	38
aprons, leather assignments 3.	6_3 8 7 3	7 8 18
assignments	63 64	16. 17
automobile, personally owned classification	3.1 (a)	2
Classification		

	Section	Page
Employees—Continued		
head coverings		38
meat laws investigators		3
performance, evaluation	3.9	8 2
promotion	3.1 (a)	
safety of	3.14	10
smoking while on duty		31
training		6
work stoppage	5.4	15
Engineers, Corps of, examination of food articles		
_ for	22.7 (a)	121
England and Wales:		
caseous lymphadenitis carcasses	24.11	132
facsimile of approved certificate	27.17	161
Enzyme material, used on steaks or cuts	18.89	118
Equine meat:		
term applies to horse meat only	29.1	188
Equipment:		
acceptable to inspector in charge	8.11	31
contamination of product, prevention	8.13	32
expellers, cleaning of	8.26	40
fine wire brushes not to be used on product	8.10	31
galvanized metal, corrosion of	8.22	38
grinder plates, reversible	8.24	39
magnetic traps	8.12	31
ozone producing	18.9	96
post-mortem inspection	10.1	44
salt solutions, preparation	18.36	
sausage containing cereal, preparation of	18.45	
sausage stuffing machines, cleaning	8.25	
sawdust not to be used if contacts product	8.15	37
separate for product accidentally contaminated		94
steel wool not to be used on product	8.10	31
storage compartments, ice	8.7	30
suitability determined by Washington office	18.8	95
_ tanking	14.2	65
Establishments:		
dead animals on premises	13.5	64
exempted	4.3, 4.6	
grants of inspection	5.1	
number embossed on containers	17.8	77
operations, inspector to notify superior concern-	O W	0
ing		2
ownership of	4.7	12
poultry, slaughter and evisceration		1
requiring inspection	2.1	1
report by inspector:	- 0	4.20
if no product prepared	5.2	15
if operations suspended	5.3	15
tenants operating in	4.8	13
vermin control	8.4	22
water supply, requirements	8.2	20
Exemption:	4 4 4 7 1	0 11 10
application for certificates of 4.3	, 4.4, 4.7 1	0,11,12

	Section	Page
Exemption—Continued		
establishments to be visited by inspector		11
horse meat not permitted in exempted establish-		
ments interstate transportation under certificates of, by	4.3 (e)	11
interstate transportation under certificates of, by	F 1 F / - \	105
common carrier2 interstate transportation under certificates of, by	5.15 (a)	135
		135
private conveyance2 nuisances not allowed on premises	13 (4)	11
ownership of establishment	4.7	12
products shipped interstate, confined to con-	200	
sumers	0544	134
retail butchers and dealers, requirements		10
shipper's certificates	25.15	135
treatment of pork to destroy trichinae	4.3 (c)	11
Expellers:		
cleaning of	8.26	40
Export:		
Canada, cooked pork products	24.12	132
caseous lymphadenitis lesions	24.11	132
inedible products	24.10	130
inspection of products for2	4.3, 24.9 129	
product processed in unofficial establishment	24.2	129
Export certificates:		
additional copies	24.8	130
destination of product	24.6	129
inedible products	24.10 24.13	130
Jamaica		132 129
number inserted on quadruplicate copy products inspected and passed, located elsewhere	24.0	123
than in official establishment	24.9	130
reverse side used if necessary		129
signature of inspector		129
Export stamps, affixing		129
Farm:	21.1	120
identification of product when shipped interstate	25.16	136
term used in connection with sausage		79
Fat(s):		
edible—	40.	0 =
cod, kidney, and breast fats	18.7	95
rendered—	7.47 (~)	90
pressings 1' rehandling when tank water present in first	1.41 (g)	30
stages of sourness	18.3	94
salt used for settling	18.34	100
transportation in tank cars between official		
establishments	25.11	134
inedible—		
denaturing, when offered for interstate move-	05.10	1.00
ment	25.19	139
rendered—	14.6	65
denaturing if resembles edible product Finland, facsimile of approved certificate	27.17	162
r manu, racsimile or approved ceromeate	_ / /	

	Secti	on Page
Fish and Wildlife Service, examination of food		
articles for22	.7 (a)	122
Flavorings:		
ingredients statement	, 17.16	79
Flies, elimination: from establishments	0.4	00
insecticides used 8.5 ()		22 25
sprays, knock-down 8.5 (25
Food and Drug Administration:	0) (0)	20
notified if material rejected for use	18.29	99
oleomargarine, inspection of		
Food articles examined for Government agencies 22.7	-22.11	121-128
Food, Drug, and Cosmetic Act:		
certain products subject to	18.86	
interstate shipments in violation of	26.1	139
Food inspectors (general) 3.1 (a	a) (6)	3
Foot-and-mouth disease:		
personal consumption entries from countries in	27.15	147
which exists reports on cured meat from countries in which	21.10	141
exists	27.9	144
restrictions on meat from countries in which		
exists	27.2	142
Forest Service, examination of food articles for 22	.7 (a)	121
Formula:		
appropriate 18.62 () changes in when necessary 18.62 ()	(3)	107
changes in when necessary 18.62 (1	(6)	107
strict adherence to required 18.62 (a France, facsimiles of approved certificates	97 17	169 164
Fruit and Vegetable Division, AMS:	21.11	105, 104
assistance to in drawing samples	22.14	128
examination of food articles for 22	.7 (a)	121
examination of food articles for 22 Fumigants 8.5 (a	a), 8.6	24, 28
Galvanized metal equipment, corrosion of	8.22	38
Gel'atin:		
ingredient of certain products		
	17.42	
Germany, facsimile of approved certificate	27.17	165
inspection of	10.8	45
		58
Glycerin, not to be added to product	18.40	
Government agencies:		
food articles examined for 22.7	-22.11	121-128
specifications 22		
Grade classification of employees, conformity of		_
assignments	3.6	7
Grade markings:		
foreign product bearing markings similar to	27.12	146
those used by Meat Grading Branch Grading:	21.12	140
examinations by Meat Grading Branch	22.10	126
markings, illustrations		70-73
terms used only by Meat Grading Branch	16.13	

INDEX 201

		_
	Section	Page
Gravy mixes, not regarded as meat food products	18.86	118
Grinders, meat, maintenance in sanitary condition	8.24	39
Grinding or chopping of beef, regarded as process-		
ing	2.4	2
Hamburger:		_
ingredients of	18.53	104
interstate shipment under exemption	4.5	11
	7.0	11
	17.45	88
cooked, labeling cured, intended for canning	18.60	105
samples submitted to laboratory	18.61	105
Scotch style, treatment for trichinae not required	18.73	115
smoked, for Armed forces, treatment for trich-	10.10	110
inae not required	18.74	115
Hardwood, used for smoking products	18.11	96
Hearts:	10.11	
calf, designation of	17.41	88
specifically named	16.31	75
Hogs. Also see Swine:	- 0.0 -	, ,
atrophic rhinitis	11.17	63
carcasses moved to another plant for processing	16.41	76
hearts, removal of clotted blood	18.25	99
stomach used as containers of meat food products	18.16	97
tongues, mutilation of	10.12	56
vesicular conditions	9.13	43
Holidays, administratively determined	7.2	18
Honduras, facsimile of approved certificate	27.17	166
Horse meat:		
animals showing symptoms of anthrax	29.4	
antitoxins, horses used for production of	29.8	189
atlantal and supraspinous bursa, examination	29.12	189
branding outer covering of product	29.13	190
certificates for interstate shipment	25.7	133
contagious diseases, reporting animals affected	20 5	100
with	29.5	189 189
dorsal bones, removal of	29.10 4.3 (e)	11
exempted establishments	29.7	189
hyperimmunization procedures identification when leaving official establishment		190
importation	27.1	142
ink used in branding	29.15	190
inspection and handling 29.		188
livers condemned on post-mortem inspection	29.6	189
marking of containers	29.16	191
melanin, inspection when deposits found	29.11	189
parts inspected after slaughter		189
Horse Meat Act:		
no exemption from inspection	25.17	136
Horse meat establishments:		
preparation of pet food	29.2	188
product derived from cattle, sheep, swine, and		400
grats, prohibited shipment with exceptions	29.2	188
walkway, elevated, around horse pens	29.3	188

	Section	Page
Horses:		
ante mortem inspection	9.10	42
post-mortem inspection		55
Hours of duty	7.3	18
Hydrolyzed plant protein, use in certain prod-		
ucts	2-18.56 10	3, 104
ucts	9.8	42
Iceland, facsimile of approved certificate	27.17	167
Immigration and Naturalization Service, examina-		201
tion of food articles for	27 (a)	122
Import certificates:	2.1 (a)	122
approved form or signed by authorized official	27.3	142
canned meat in several lots	27.4	142
	27.17	142
facsimiles of approved foreign	21.11	140
facsimile signatures of authorized foreign offi-	07.10	100
cials	27.18	186
foreign countries for which approved	27.16	147
Imported product:	~	
application for inspection, form used	27.5	143
breach of Customs bond	27.19	187
canned meats in several lots	27.4	142
correspondence with Branch	27.11	145
cured meats from countries in which rinderpest		
or foot-and-mouth disease exists	27.9	144
examination and sampling	27.7	143
foot-and-mouth disease or rinderpest, from coun-		
tries in which exists	27.2	142
foreign countries from which eligible	27.16	147
grade markings same as used by Meat Grading		,
Branch	27.12	146
horse meat	27.1	142
inspection at other than official establishment		143
personal use27.1		
reporting conditions out of ordinary	97 10	145
requirements 27.	1 97 10	
requirements 27. samples, laboratory, reporting	1-21.13 97 19	142
though anomination and the sample samples and the sample s	27.13	143
thorough examination required	21.1	145
unsound cans, disposition	27.8	144
Inedible products:	0440	100
certification for export	24.10	130
"Information for Applicants for Federal Meat Inspection":		
drawings in accordance with	4.14	14
sanitation		19
Ingredients:	1.0, 0.1	10
application of list of	16.28	74
cereal not permitted ingredient of thuringer or	10.20	1.7
corned hoof hash	18.46	102
corned beef hashcracker meal, macaroni	17.21	81
anushed on ground have not to be used		98
crushed or ground bone not to be used	18.22	30
declaration of previously cured meats in state-	1005	75
ment	16.35	75 96
fixed quantities prescribed	17.38	86
gelatin	18.37	101

Ingredients—Continued	Section	on Page
identification maintained		75
18 69	(2) (2)	106
labels, listing on17.	16-17.19	79-81
listed in order of percentages	.8.63 (e)	108
meat loaf and the like, labeling	17.43	88
mixtures containing cereal, soya flour	18.87	118
monosodium glutamate and hydrolyzed plant		
protein 18. order in which shown on statement of	52–18.56	103, 104
order in which shown on statement of	17.57	92
preservatives		
sausage	18.39	
smoked meats, declaration		
specific declaration for certain products		
substances fabricated from variouswater added to luncheon meat and similar prod-		81
ucts	18.42	101
water or wine added to sausage treated for trich-	10.42	101
inae	18.75	116
wholesome and acceptable 18.62	(h) (4)	107
Ink:	(8) (1)	201
approved branding	16.11	69
horse meat, formula used in branding		190
preparation for use with hot iron brands	16.12	69
Inland Waterways Corporation, examination of		
food articles for	22.7 (a)	122
Insect sprays and powders 8.5 (b)	and (c)	24, 26
Insecticides	(2), 8.6	25, 28
Inspection:		
applications for	4.1, 4.7	10, 12
establishments requiring	2.1	1
food articles for Government agencies 22	2.7-22.11	121–128
grants of, and inauguration	5.1	14
import product at other than official establish-		1.49
mentingrester to notify superior regarding energtions	$\begin{array}{c} 27.6 \\ 2.5 \end{array}$	$\begin{array}{c} 143 \\ 2 \end{array}$
inspector to notify superior regarding operations		
routine post-mortemsuspension of	5.3	15
Inspection Facilities Section, Washington office 3.2		5
Inspection legend:	(4) (1)	· ·
approval of marks of inspection	16.1	67
heef tenderloins	16.19	70
calf carcasses with skin attached	16.17	70
carcasses clothed after washing	16.15	70
certification of inspection and labeling	17.34	85
labeling material1	7.2, 17.5	77
number and location of imprints	16.18	70
Inspection Procedures Section, Washington	() (0)	le.
office3.2	(a) (8)	5
Inspectors:	10.0	4.4
areas set apart for	21 (2)	44 2
classification of and duties	3.1 (a)	6, 45
final	(9) (6)	3
food inspectors (General) 3.1 imported meats and animal byproducts 3.1	(a) (0)	3
imported meats and animal byproducts 3.1	(a) (1)	0

Section	Page
Inspectors—Continued	
in charge 3.1 (a) (1)	2
laboratory 3.1 (a) (4)	3
meat 3.1 (a) (5) operations, notify superior 2.5	3
operations, notify superior 2.5	2
preparation of product 18.63 (a) and (b) 10	7, 108
responsibility to determine compliance with reg-	400
ulations	106
supervising	2
training 3.4	6 2
veterinary meat	4
assignments of employees	Q
duties and responsibilities 3.1 (a) (1), 3.3	2, 6
notification to Washington office when on leave 6.1	16
Interstate shipments. See Transportation.	10
Intestines, prepared for food purposes as chitter-	
lings 18.24	98
Ireland (Eire), facsimile of approved certificate 27.17	
Italy, facsimiles of approved certificates 27.17 16	9, 170
Jamaica, export certificates 24.13	
Kidneys, cystic, not to be used for food purposes 18.23	98
Labeling:	
acceptability of materials 17.11	
address of manufacturer or packer 17.22	
applicable regulations	
containers	77,78
correct labeling required 18.62 (a) (4), 18.62 (b) (2) 10	6, 107
detailed requirements	
filing of material 17.60 form for transmittal of sketches and labels 17.35	92 87
imitation sausage	
ingredients, order in which shown 17.57	92
master file in Washington office 17.35	
monosodium glutamate or hydrolyzed plant pro-	00
tein added to product	3. 104
	91
purpose of requirements 17.1	77
qualifying phrases17.22	81
quantity of contents	83
responsibility of inspector 17.59	92
stamped additions on approved labels 17.36	86
supervision over 17.10, 17.11	78
terms used in 17.12	79
Laboratories:	100
ability to handle particular samples 18.63 (f)	109
analysis in connection with specification exam-	125
ination work 22.9 (c) cartons for samples forwarded to 18.68	1125
forms for samples to show all information 18.67	112
identification of samples 18.64 (b)	
	_
import samples 27.13 information supplied by 18.63 (a) and (c) 10	7, 108
the state of the s	

	Sect	ion	Page
Laboratories—Continued	2000		- way
mailing of samples to1	8.63 (g))	109
plastic bags furnished by 1	8.64 (d))	110
reporting samples	18.6	5	111
samples for examination			
18.61, 18.62(b) 5) and (7), 18.62 (c) (3), 1	18.63(b)	105	-108
special handling of samples	18 60	3	112
Laboratory inspectors, duties of 3.1	(a) (4))	3
Lacquer, on inner surface of metal drums	18.1	5	97
Lard:			
carcasses and parts rendered into	15.1		67
pork jowls, rendered into17	'.50 (a)		90
refined, definition	17.49		90
residue incident to rendering 17.47	(g) (1)	•	90
Leave:			4.0
notification to Washington office	6.1		16
relief for inspectors in charge	6.1		16
when operations suspended	5.3	3	15
Lesions: reporting1	19 11 5	7	50
tuberculosis			59 59
Lips from cattle, calves, sheep, and goats			98
Listerellosis:	10.20	,	30
animal's recovered from	11.15		63
symptoms of	9.11		42
Listeriosis, animals showing symptoms of	9.11		42
Liver sausage, term inaccurate in certain cases	17.54		91
Livers:	2110		~ _
bile from	14.8	}	66
calf, designation			88
condemned, use for fish food	14.7	7	66
Livestock Sanitary Officials:			
communicable diseases, reports 2	2.1 - 22.3	119,	120
mucosal disease, diarrhea or rhinotracheitis,			
reports	22.6		121
Loaf, definition	17.43		88
Loaves, meat, dried skim milk used in	18.27	1	99
Luxemburg, facsimile signatures of authorized offi-	07.10)	106
cials	27.18	•	186
Lye solutions, used to remove outer surface of veg-	18.10		Q.G
etables	11.5		
Lymph glands, hog heads	11.10		61
Lymphoma, malignant	27.17	171.	172
Magnetic traps			
Mail:	0,12		-
addressing, for Washington office	3.10)	8
nackages	3.11		9
packages	17.51		91
Manufacturer or packer, address on labels	17.22	2	81
Marine Corps:			
examination of food articles for			4 6 6
99.7 (s) 22.8 (d)	and (e)	122,	123
special brands	22.13		127

Section I	Page
Maritime Administration, examination of food ar-	122
Marking:	
approval of marks of inspection 16.1	67
"artificially colored" statement16.23	73
correct marking required 18.62 (a) (4), 18.62 (b) (2) 106,	
curing mixtures, seasonings, and the like 18.26	99
features other than inspection legend on ship- ping containers	76
grade markings 16.14	69
horse meat and containers 29.13-29.16 190,	
hot-iron brands, legibility	68
immediate or true as well as shipping containers 16.38	76
ink, approved branding 16.11, 16.12	69
shipping containers, inedible rendered fat 16.42	76
shipping containers, permissible combinations 16.37	76
"U. S. Condemned" and "U. S. Passed for Cooking" brands	45
	40
Materials: suitability determined by Washington office 18.8	95
	30
Meat byproducts: declaration of certain 16.34	75
	102
Meat, cured. See Cured meats.	
Meat food product:	
	117
	117
soup bases and the like, not regarded as 18.86	118
Meat Grading Branch, Livestock Division, AMS:	
	121
foreign product bearing grade markings same as used by	146
used by	126
Meat inspectors duties of 3.1 (a) (5)	3
inspections by 22.10 Meat inspectors, duties of 3.1 (a) (5) Meat laws investigators, duties of 3.1 (a) (8)	3
Melanin:	
deposits of	61
inspection of horse carcasses when deposits	100
found 29.11 Memorandum of understanding with Federal	189
Memorandum of understanding with Federal	123
agencies22.8 (c) Metal:	120
clips or staples, not permitted with labels or tags 16.21	72
copper, cadmium and lead not permitted if in	
contact with product18.14	97
drums, coated on inner surface with lacquer 18.15	97
parameter parame	102
The state of the s	173
The state of the s	101
Monosodium glutamate, use in certain products 18.52–18.56 103, Mutilation of carcasses or parts, unnecessary 10.7	45
Navy:	10
	124

	Section	Page
Navy—Continued		
examination of food articles for		
22.7 (a), 22.8 (d) as	nd (e) 1	
special brands	22.11	127
"Needle Grass," handling of sheep carcasses af-	3) (0)	~~
fected with10.11 (example 10.11)	a) (b)	55
determination of17.30		
labeling requirements 17.23	17.07	83-85
Netherlands, facsimiles of approved certificates	$\frac{-17.27}{27.17}$	81, 82
New Zealand, facsimile of approved certificate	27.17	175
Nitrates:	41.11	110
addition to products	18.51	103
Nitrites:	10.01	100
addition to products	18.51	103
violations for excess use18.	63 (d)	108
	3.5	7
Non-federally inspected meat, denaturing	25.17	136
Northern Ireland:		
facsimile of approved certificate	27.17	176
meat from caseous lymphadenitis carcasses	24.11	132
Norway, facsimile of approved certificate	27.17	177
Odors:		
	13.2	64
product suspected of having absorbed	18.2	94
Official set of instructions	3.13	9
Oil, denaturing, addition to rendered animal fat 14	.3, 14.4	65
Oleomargarine, inspection of 7.3 (28.1	187
Overtime service, payment for	$\alpha), 7.4$	18, 19
Ownership of official and exempted establishments		12
Ozone, lamps or equipment producingPackages, mailing of		96
Panama Railroad Company, examination of food	9.11	9
articles for 22	7 (2)	122
Papain, used on steaks or cuts	18.89	118
Paper cups, paraffined, used with second hand bar-	10.00	110
rels	8.19	38
Paraguay, facsimile of approved certificate	27.17	178
Parcel post interstate shipments via		133
Parcel post, interstate shipments via	a) (4)	3
Permits for return of alleged unsound product	25.18	138
Pet food, preparation in horse meat establishments	29.2	188
Pickle, cover and pumping	18.12	96
Pimento and pimiento	17.17	80
Pistols, captive-bolt, for stunning animals 10.11 (a	a) (1).	46
Plastic bags, used as containers of samples 18.	64 (d)	110
Plastic films, samples of	17.11	78
Poland:	10 (h)	1 477
authentication of certificates 27.	10 (D) 97 17	147 179
facsimile of approved certificate	27.17	119
Pork:	18.72	114
destruction of trichinae by heating	10.12	114
Pork fat: rendered	48 (a)	90
1 chacted 11.11 (8) (2), 11.		

	Section	Page
Pork fat—Continued statement of ingredients	17.19	81
Pork jowls: skinned, listed as pork	16.30	75
skillined, listed as pork		90
The second secon	17.50	
	17.13	79
Pork stomachs:	10 90	75
listed in statement of ingredients	16.30	75 70
	16.20	70
	17.54	91
Positions, number and grades at station	3.8	8
Post mortem inspection:	4 / \	F 0
calves10.1		52
cattle10.1		46
detailed requirements		44
hogs10.1	l (b)	50
horses 10.1	1 (e)	55
reactors that have died otherwise than by		
slaughter	9.3	41
routine	10.11	46
sheep	l (d)	53
	10.10	46
Potted and deviled meat food product, not to con-		
tain added moisture	17.58	92
	2.3	1
Poultry Inspection Branch, Poultry Division, AMS,		
examination of food articles for22.	7 (a)	121
Preservatives, for certain ingredients	18.41	101
Pressings, definition	7(g)	90
Prisons, Bureau of, examination of food articles	(6)	
for22.7	(a)	122
Processing:	()	
includes grinding or chopping but not boning	2.4	2
responsible supervision to be provided 18.62 (a)		$10\overline{6}$
Product(s):	(0)	100
alleged unsound, returned	25 18	138
	18.30	100
	18.21	98
common name on labeling 17.12,		79, 91
compliance with regulations	18.69	106
	18.6	94
	8.13	32
		94
defrosting identification, positive, required 18.62 (a)	10.0	106
interestate transportation of federally inspected	95 1	133
interstate transportation of federally inspected	40.1 10.00	98
lips from certain animals minimum meat requirement for certain 18.63	2 (2)	108
nnongging shipment for further	16.00	72
processing, shipment for further		
	16.24	73
retained if not in compliance with regulations 18.64	(a)	109
sawdust, not to contact	0.10	37
shipment interstate in establishment vehicle	20.8	133
shipment under official seal 25.9,	25.10	134
shipping and receiving when inspector not on	7.1	1.77
duty	7.1	17

209

	Section	on Page
Product(s)—Continued		
smoking, use of hardwood or sawdust	18.11	96
soiled accidentally 8	.16, 18.1	37, 94
transportation via another state of nonfederally inspected	25.0	133
Public Health Service:	20.2	199
examination of food articles for	22.7 (a)	122
specifications for food articles	22.7 (b)	
Quantity of contents 17.2	27-17.29	82, 83
Quantity of contents 17.2 Railroad, interstate shipments via	25.6	133
Railway Express Agency, interstate shipments via	25.5	133
Rating system for evaluating employee perform-		
ance	3.9	8
Reactors: animals that have died otherwise than by		
slaughter	9.3	41
brucellosis, reporting		60
identification of		41
tags missing from animals	9.5	41
treated as suspects		41
"Ready to Eat":		
pork products bearing statement1	6.25 (a)	74
use of term		89
Reindeer, slaughtered in official establishment		1 94
Reinspection and preparation of products 18		16
Relief for inspectors in charge on leave		67
Rennets, calf, production of	18.17	97
Reports of diseased animals to Federal and State		
officials 2	2.1-22.3	119, 120
Resin, on inner surface of metal drums	18.15	97
Retail butcher or retail dealer, holding exemption		4.0
certificate	4.3	10
Retail intact, products sold at		73 44, 45
Retained carcasses, tagging 1 Rifle, used for stunning or killing animals 10.11	(2) (1)	44, 45
Rinderpest:	(a) (1)	40
personal consumption entries from countries in		
which exists	27.15	147
reports on cured meat from countries in which		
exists	27.9	144
restrictions on meat from countries in which	077.0	140
exists	27.2 8.5 (d)	$\begin{array}{c} 142 \\ 27 \end{array}$
Rodent baits	8.6	28
Safety:	0.0	20
employees	3.14	10
programs	7.5	19
Salt:		
clean and free from extraneous material, if in	10.00	100
contact with product	18.32	$\begin{array}{c} 100 \\ 100 \end{array}$
containing agents in approved kind and amount	18.31 18.36	100
equipment for preparing solutions of handling to preclude soiling	18.35	101
nanding to precide solling	10.00	

210 INDEX

	Secti	on Page
Salt—Continued		,
settling rendered fats	18.34	100
wetting of cloths in solution	10.13, 18.33	57, 100
Samples:		
ability particular laboratory to handle		
cartons and franks for forwarding		
cereals, spices, and similar materials		
collection and mailing		
containers	_ 18.64 (d)	
forms to show specific information	18.67	
hams, laboratory analysis	18.61	
identification ofimport product, reporting to laboratory	. 10.04 (<i>D)</i> 97.19	109 146
nroadured used in compline	1964 (0)	110
procedures used in sampling reporting	18.65	111
special handling by laboratory	18.66	
submitted if difference of opinion	1864 (2)	
taken if deemed necessary 18.62 (b) (5) and (7)	107
Sanitation:	o, and (1)	101
exclusion of vermin from establishments	- 8.4	22
requirements	8.1-8.26	19
Sanitizing agents for cleaning use	3.3 (a) (2)	$\overline{21}$
Sausage:	()	
cereal, equipment used for product containing.	18.45	102
condiments added	40.44	101
cooked and not cooked, water added	18.48	102
dried skim milk used in	18.27	
dye-impregnated artificial casings	18.58	
"farm" or "country style"	17.15	
gelatin not customary ingredient		
imitation, labeling of		
ingredients of		101
prepared with meat byproducts to exclusion	01	100
meat stuffing machine, cleaning	18.43	
towns the same to same	8.25 18.79	
temperature prior to canning water or wine added when treated for trichina		
Sawdust:	e. 10.19	110
contacting product	8.15	37
hardwood, for smoking products		
"Scotch Style" hams, definition	18.73	
Scotland:		
facsimiles of approved certificates	27.17	180, 181
meat from caseous lymphadenitis carcasses		
Scrap fat, definition		89
Scrapie, reporting		
Sealed cars:		
form for shipment of unmarked products		
interstate transportation of product		
product requiring special supervision		
report of non-arrival		134
Seals, lead, use not permitted for other than dri	ed	0.0
meat or product	18.13	
Seasoning preparations	18.88	118

	Secti	on Page
Settlings, definition		
requirements for post-mortem inspection	10.11 (d)	53
exempted establishments	25.15	135
horse meat	25.7	133
products shipped under sealsample form, shipments under exemption		134 137
U. S. inspected and passed product		
Shipping containers:		
applicable marks of inspection, permissible combinations of product	- 16.37	76
features other than inspection legend applied to		76
marking of, if also immediate or true container	16.38	76
Sketches and labels, form for transmittal		87
Skimmings, definition Skin, removal of portions of	17.47 (e)	90 89
Slaughter:	LII.XI (a)	00
actual time involved		
emergency, provisions for		42 76
Smoked meats, declaration in list of ingredients Smoking, while employees on duty		31
Sodium casineate, in preparation of loaves		99
Solutions:	· · (~) (0)	01
sanitizing agents 8.3 vermin control 8.3		21 26
Soup bases and dehydrated soup mixes, not re-		20
garded as meat food products	18.86	
Spain, facsimile of approved certificate		182
Special Projects Section, Washington office 3.2 Specifications:	(a) (b)	U
examination work, charges	22.9	124
food articles for Government agencies	000 (a)	100 100
Specimens: 22.7 (b),	22.8 (C)	122, 123
submitted to Biological Control Section1	1.7, 11.14	59, 62
Spice extractives, not to be listed as spices		74
Spices: ingredients list on labels	17.14	7 9
Spitting on floor, discouraged		31
Sprays, to eliminate vermin	8.5 (b)	24
Standby time, use of for instructions	3.5	7
Staples or metal clips, use not permitted with labels or tags	16.21	72
Steel wool, not to be used on equipment in contact		
with product	8.10	31
Sterilizers, maintenance and use of	10.2 17.7	44 77
Stockinette, containing properly labeled product Storage compartments, ice	8.7	30
Supervising inspectors, duties of 3.1	(a) (2)	2
Supervisor, responsibility of	18.62 (c)	107
Suspects: post mortem inspection	10.10	46
report of disposition1		
*		

	Section	Page
Suspension of inspection Sweden, facsimiles of approved certificates	5.3 27.17 18	
Swine:	41.11 10	50, 104
hyperimmune, ante mortem inspection post mortem inspection, detailed requirements 1		42 50
Switzerland, facsimile signatures of authorized offi-		400
Tables, for cleaning product accidentally soiled	$\begin{array}{c} 27.18 \\ 8.16 \end{array}$	186 37
Tags:	0.10	01
list of ingredients		74
unlisted 1 Tails, definition 1		59 89
Tank cars:	1.21 (0)	0.0
rendered animal fat transported between official		404
establishments Tanking:	25.11	134
control of objectionable odors	13.2	64
cooking time necessary to destroy contents for		
food purposes	14.2	65
equipment for inedible and condemned material handling of material		63 65
recording identifying marks or numbers on car-		00
casses	13.4	64
recording information on daily form		64
rooms and tanks		63, 64
Telephone, long distance, expenses	$\frac{3.12}{3.12}$	9
Temperaturing devices	18.50	103
Tenants operating in official establishments	4.8	13
"Tender": branding of word on heated and smoked prod-		
uct 1	6.25 (a)	74
use of term	17.46	89
Tennessee Valley Authority, examination of food	99 77 (-)	100
Testicles, from bulls reacting to Brucellosis test	22.7 (a) 11.9	122 61
Thermometers, products heated to destroy trichinae		114
Threadworms, in hog tongues	10.12	56
Thuringer, cereal not permitted	18.46	102
Tongues: specifically named	16.31	75
threadworms in hog	10.12	56
Tongues and brains, sheep and lambs	17.41	88
Trade Label Section, Washington office	a) (10)	6
Transportation: exemption	25.15	135
horse meat		133
inspected product	25.3	133
interstate in establishment vehicle		$\begin{array}{c} 133 \\ 72 \end{array}$
requirements 25		133
under seal	25.10	134
violations of Food, Drug, and Cosmetic Act	26.1	139
Trash, accumulation not permitted	8.23	39

	Section	on Page
Trichinae:	10.70	114
cured boneless pork loins treated for heating pork to destroy	18.70 18.72	114 114
Scotch Style hams, treatment not required	18.73	115
smoked hams for Armed forces, treatment not re-	20110	110
quired	18.74	115
water or wine added to sausage treated for	18.75	116
Trimmings, cheek and tongues, tissues included	17.00	0.1
under term	17.20 17.53	81 91
Tuberculin test, cattle reacting to	11.6	59
Tuberculosis:	11.0	00
disposition of hog carcasses affected with	11.1	58
identification of animals affected with	22.5	120
lesions, reports1 reports covering infected animals1	1.3, 11.4	59
reports covering infected animals		120
reports involving non-reactor bovine animal	11.7	59 64
Unborn calves, skinning	$13.3 \\ 27.17$	$\begin{array}{c} 64 \\ 185 \end{array}$
Vats, reconditioning	8.18	38
Vegetable oil, application to sausage casings	18.38	101
Vegetables, use of lye solution	18.10	96
Vendor, charges against for specification examina-		
tions	22.8 (c)	123
Venezuela, facsimile signature of authorized of-	07.10	106
ficial Vesicular conditions, hogs		186 43
Vermin, elimination and destruction	8.4–8.6	
Veterans Administration:	0.1	
brands	22.8 (e)	123
charges for specification		
examinations 22.8 (c), 22.9 (d)		
examination of food articles for	22.7 (a)	$\begin{array}{c} 122 \\ 122 \end{array}$
specifications for food articles	(a) (3)	2
Washington Office, organization of	3.2 (a)	3
Water:	0.2 (4)	J
added to sausage	18.48	102
amount added to luncheon meat	18.42	
supply at official establishments	8.2	20
Weight:	(a) (5)	106
finished product 18.62 products packed at catch weights	(a) (b) 17.28	82
statement of, on casings	17.27	82
Whey, dried:	_ ,,,	
preparation of loaves	18.28	
with other substances, not acceptable	18.87	118
"Wild Oats", handling of sheep carcasses affected	(4) (6)	55
with	7 47 (c)	89
Work stonnage report of	5.4	
Zoological laboratories, accessibility of 3.1	(a) (4)	3
Zoological Park. National, examination of food		
articles for	22.7 (a)	122

